Mary Christine Ugobi-Onyemere, IHM

# The Knowledge of the First Principles in Saint Thomas Aquinas

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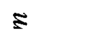
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*To the Immaculate Heart of Mary and the Sacred Heart of Jesus,*
*I dedicate this dissertation for all in search of objective truth.*



*Vidimus et adprobavimus ad normam statutorum*

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# Contents

# A Note on the Texts and Citations

There is no single completely adequate edition of Thomas Aquinas' works in Latin. Some Latin texts, supposedly applauded as superb editions, might be incomplete. For this reason, we have utilised most officially certified texts, like the Leonine and Marietti versions, in most of our citations.

We tried as much as possible to keep to the formally approved translations. However, we made changes where we noticed an obvious change from the original Latin text. In such cases, we indicated that the official translation is altered to represent the sense in the Latin version we quoted. Regarding other texts that lack official English translations, we tried to be meticulous and to remain faithful to the Latin texts we used. For such, we did not generally indicate that translations are ours, because we assumed the obvious fact.

In some of our citations where we considered the arguments in question essential, we repeated the Latin texts in footnotes for concurrence. Generally we used single inverted commas to highlight English words and double inverted commas for proper quotes. This is to enable us to differentiate between Latin and other foreign words in the body of the thesis that are always in italics and to facilitate the work for our readers. In general, except where necessary, we did not indicate the editions of works in our citations; we just cited the publishers.

For the Latin texts of the works of Saint Thomas Aquinas, we followed the online resource of the *Corpus Thomisticum* of E. Alarcón in our bibliographical arrangement instead of the chronological order of their publications.

On works of Aristotle, for the purpose of this inquiry, we mainly used Barnes and Ross' English translations. For other classical works, we indicated the translations we used in the footnotes and the bibliography.

# Abbreviations

## Works of St. Thomas Aquinas

| | |
|---|---|
| *Comp. Th.* | *Compendium Theologiae* |
| *De Malo* | *Quaestiones disputatae De malo* |
| *De Pot* | *Quaestiones disputatae De potentia* |
| *De Ver* | *Quaestiones disputatae De veritate* |
| *De Virtutibus* | *Quaestiones disputatae De virtutibus* |
| *In APst* | *In libros Posteriorum Analyticorum* |
| *In DC* | *In libros De caelo et mundo* |
| *In De Anima* | *Sententia libri De anima* |
| *In De Trin* | *Super Boethium De Trinitate* |
| *In Ethica* | *Sententia libri Ethicorum* |
| *In Metaph* | *In* XII *libros Metaphysicorum Aristoteles* |
| *In Phys* | *Expositio in libros Physicorum* |
| *In Sent* | *In quattuor libros Sententiarum* |
| *Q. D. De Anima* | *Quaestiones disputatae De anima* |
| *SCG* | *Summa contra gentiles* |
| *ST* | *Summa theologiae* |
| *Super ad Coloss* | *Super ad Colossenses* |
| *Super Epist. I ad Tim* | *Super ad Timotheum I* |

## Other Works and General Abbreviations

| | |
|---|---|
| *APr* | *Prior Analytics (Analytica Priora)* |
| *APst* | *Posterior Analytics (Analytica Posteriora)* |
| Comm | Commentary |
| *CPR* | *Critique of Pure Reason* |
| *EE* | *Eudemian Ethics (Ethica Eudemeia)* |
| *EN* | *Nicomachean Ethics (Ethica Nicomachea)* |
| Gen | General |
| Intro | Introduction |
| *LSD* | *Logic of Scientific Discovery* |
| *Met* | *Metaphysics (Metaphysica)* |
| *Phys* | *Physics (Physica)* |
| PNC | Principle of Non–Contradiction |
| *Rhet* | *Rhetorics (Rhetorica)* |
| *Top* | *Topics (Topica)* |
| Trans | Translation |

# Foreword

I am pleased to present this work written by Mary Christine Ugobi-Onyemere on the theme of the first principles in Thomas Aquinas. Judging from the little available bibliography, I would observe that such an investigation was never carried out in a systematic way regarding Aquinas, as instead it was in the valuable volume of Irwin on the first principles in Aristotle.

I think this work is important primarily because of the fundamental role of the principles in philosophy, particularly in the context of a metaphysics that is meant to be realistic and rational. In most of his works, Aquinas continuously refers to the first speculative principles pointing to Aristotle, and to the first ethical principles exemplified in the so-called 'synderesis'. The habitual knowledge of the fundamental principles (habit of *intellectus*) is in Thomas Aquinas the 'first science', or rather the pre-science existing as the basis of the whole intellectual enterprise of the human person, both in science and in moral practice, while the climax of this loosening of the rational capacity of man is the intellectual habit (also voluntary) called the virtue of 'wisdom'.

In such a way, the natural course which every human person is invited to follow in his/her life, as far as he/she tends to happiness, or just to find a sense for his/her existence, is the passage to the personal *logos* (reason) from *voús*, the initial moment, almost 'innate' in every man and woman, though depending upon experience, until the arrival at the virtue of *sofía*, which for a Christian means also wisdom as a gift of the Holy Spirit enriching the knowledge of faith.

In this topic about the first principles, we find in Aquinas sufficient elements that enable us to present a balanced dynamism between mind and will, since the principles refer to being (*ens*), as such, which is both true and good (transcendentals of being), as well as an adequate relationship between faith and reason. Indeed, human wisdom is dynamically open to divine wisdom, since the human person should not stay locked up in his rational capacities. These capacities are weakened because of our existential condition, characterised as a personal struggle between good and evil, a point clearly contained in the Thomistic account of human rationality, especially if we consider the theological truth of sin as a fundamental deviation of our intellect and will (original sin).

This book carries out a thorough investigation of these outstanding themes. It seems important for me that first principles are not treated in this study, as they are not in Aquinas, within a purely logical interest typical of the tendency to the "axiomatic foundations of science". The issue of the metaphysical principles is not parallel to the questions about the logical foundation of geometry or

mathematics, as was the case in Euclid or in contemporary thought in Bertrand Russell or David Hilbert. The theme of the first principles is not necessarily linked to rationalism. The principles are a "way of an underlying lively thought," rarely explicit, except for the study performed by philosophers. In this sense, first principles are to be considered, and this is the case of this work, in reference to the initial cognitive grasp of the intellect in regards to *ens* and to the mentioned transcendentals *verum* and *bonum*.

The Thomistic *reductio ad ens* is nothing but the 'reduction' of human knowledge to the principles. This is a point that ensures the soundness of any rational methodology and remains open, in accordance with the innate need of wisdom, to the 'last reduction', which is satisfied in the knowledge and love of God as an infinite Being and source of every form of created being.

I hope that reading this book will become illuminating for further research on this topic. The disclosure of its various elements is far from being exhaustive. Indeed, the study could be widened with questions, such as, the principle of causality, the principle of finality and many others, or with the analysis of "secondary principles", not for that reason unimportant, which are used by Aquinas in the course of his philosophical and theological developments.

Ultimately, any philosophy is to be assessed especially in its grounding principles. For this reason, the theme presented in this book is certainly nuclear. It is worthwhile to study it with clarity, order, and amplitude. No doubt Mary Christine Ugobi-Onyemere goes in this direction.

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# Introduction

The theme of first principles is fundamental in the whole of reality and is simultaneously a vast area. This notion occupies a principal place in Aquinas' philosophy because the Angelic Doctor realises its indispensability in any realistic endeavour and dedicates much attention to it. As a result of its profundity and enormity, this theme is not so easy to grapple with. This could explain why for several centuries of philosophy, there are few or no investigations particularly on the first speculative principles. Beginning from the metaphysical, epistemological, ethical, and all the other natural scientific enterprises, the first principles form the nucleus of any realistic knowledge. The grounding is that for the human mind to know involves knowledge with and through the first ontological principles. For this reason, no one can think without presupposing the first principles in any of their modes, implicitly or explicitly. Even with their unconscious usage, the first principles play a substantial judgmental role and remain evident in themselves. As such, they belong, as it were, to a prior noetic scientific modality, the *nous* (*intellectus*).

In the most fundamental aspect of philosophy, the very *primum cognitum* is an existential judgment that is ascertainable as the most basic ontological principle of the actually known reality. In the same vein, the transcendental attributes of the *primum cognitum* could express the most primary principles. The implication is that the first principles cover the entire notion of the transcendentals by their support and ontological regulation. This is to say that to know the first principles is a lead to and implies the knowledge of the existent and transcendental reality. Thus, despite their difficult and challenging nature, the first ontological principles form part of the most interesting and fundamental research of the realistic philosopher. Subsequently, our endeavour to investigate mainly the first Thomistic speculative principles is to understand and appreciate better their indispensable nature and to underscore their significance in any philosophical venture.

To study the first realistic principles in the Thomistic context calls for a historical accent especially on classical philosophy. This is because the question of first principles originally is classically Aristotelian. Therefore, it is also obviously a huge theme in Aquinas because of his discovery of its central character. Consequently, the Thomistic notion of the first ontological principles largely has an Aristotelian flair. In effect, most of Thomistic philosophical thought is permeated with ontological principles, some of which belong to Aristotle. Aquinas uses the first principles copiously in his metaphysics; he also employs them mostly for definite themes needing substantial definitions. Aristotle discusses the first principles mainly in the *Posterior Analytics* and *Metaphysics*. In the *Posterior*

*Analytics* he considers the first principles of scientific proof, while relating them back to real, immediate, and indemonstrable first premises. In the *Metaphysics*, he addresses the context of the controversy against the Sophists' relativistic apparent denial of the identity of 'being'. To combat them, Aristotle employs the maximum principles of 'being' understood in all their universality, as the principle of non-contradiction. Through this, Aristotle shows that the first principles are irrefutable and cannot be evaded. They are a form of incontrovertible prior natural knowledge to all other knowledge, not sequentially, but as the very condition of any intelligibility in reality.

This obvious truth of the first principles does not assert itself, and it is always caught in a human manner, in other words, in an imperfect manner. For this reason, a humble frame of mind is also necessary for any philosopher who wishes to know or search into the depths of this truth. However, all peoples, in their thinking, still use correctly the fundamental metaphysical principles. But how can one grasp these first principles in reality? That is a task of the philosopher in his speculation to lead the light of reason to the knowledge of the first principles. In view of the foregoing, it is obvious that part of the task of the first philosophy is to conduct the human mind to the knowledge of the first ontological principles on which the entire reality is understood.

When we speak of knowledge of the first ontological principles, it is necessary to remember that they could be extrinsic (such are efficient and final causes), or intrinsic as essential constituents of things as in matter and form, substance and accident or 'being' itself. In Aquinas' understanding, as we already know, the object of metaphysics, is 'being'. Since the first principles of metaphysics are the principles that concern immediately and directly 'being' intensively conceived, they constitute the basis of the search for wisdom. They are also simultaneously (the first practical principles) the primary sources of all perfection and the ultimate end of every action. Although aligned with 'being', the study of the first Thomistic ontological principles presents another challenge of methodology. The Angelic Doctor does not systematically discuss the first principles that correspond to the basic postulates of 'being' or nature. Even the Thomistic employment of the first principles in other philosophical fields is not so easy to handle because of their vastness and unorganised system.

Confronted with this dilemma and determined on a holistic discourse, we came up with five main chapters. As we mentioned earlier, the notion of the first Thomistic principles are retraceable to the classical thought, namely Aristotelian. In order to establish this fact and to authenticate the Thomistic sources of the knowledge about these fundamental postulates, we saw a necessity of the background setting. Thus the First Chapter is on historical background. This is meant to accord one a better appreciation of the theme because as a fundamental argument there is need for an understanding of the diverse historical nuances.



The preceding investigation leads to the Second Chapter, which is the actual investigation of the nature and role of the first principles in the Thomistic context. This chapter centres on the significance of the Thomistic notion of the first principles stemming from the Aristotelian origin. In it we discover and locate the said first principles in the different works of the Angelic Doctor. The chapter concludes with an emphasis on the profundity and fundamental functions of the first ontological principles.

Thus situated, this chapter paves the way for our considerations in the Third Chapter, which treats of the knowledge of the first principles. This section examines the conception of the first principles through *intellectus* and *ratio*. In addition, to facilitate a better grasp of the argument, we survey a few Thomists' analyses on Aquinas' understanding of the *primum cognitum*. This serves as a lead to further investigations through the research.

The Fourth Chapter addresses mainly the habits of the first Thomistic principles as the nucleus of the functional gnoseological modality of the principles. Among others, we discover the significance of *habitus principiorum primorum* in its dual facets, *intellectus principiorum* and 'synderesis'. We investigate *intellectus principiorum* as the noetic habit whence all knowledge flows. This leads to our consideration of the principle of non-contradiction (PNC) as the primordial expression of *intellectus principiorum*. We further determine the difficulty associated in the idioms employed by the Angelic Doctor in the entire discourse, especially on the agent intellect. Unlike the usual Thomistic language, the intricacy stems from an idiomatic mix (especially concerning illumination and participation), as some Platonic flair is evident through Aquinas' suppositions. Thereon, the chapter concludes with our investigation of a crucial contention about Aquinas on innatism through the hypothesis on *intellectus agens* and its first gnoseological activity.

Finally, in Chapter Five, we try to rigorously fine-tune the entire research by the analyses of indirect proof and evidence of the first principles. Since there is no proof for the first principles as fundamental 'firsts', we discover the Aristotelian dialectical method as a way to authenticate the first principles. This entails the use of the denier premise in demonstrating the principles *ad absurdum* through the PNC. We also consider the significance of the self-evident nature of the first principles. Through it, we study the meaning of *per se notum secundum se* and *per se notum quoad nos* in two dimensions, namely, *omnibus per se nota* and *per se notae solis sapientibus*. We further inquire into the nature and functionality of the mind's *resolutio* in its two features. In this, we address also the sciences as arising from rational analysis and synthesis. We ascertain that real knowledge, as such, is in the rational bi-directional movement (synthesis-analysis) through the intellect. In particular, we establish the necessity of going from *intellectus* to *sapientia*. We find that the intellect's primacy is completed in the judgmental habit

of *sapientia*. With this, we underline the role of metaphysics in the discovery of such an ultimate principle as the mind's complete *resolutio*.

In view of the foregoing, the scope of the thesis is to determine the significance and the role of first Thomistic principles in the knowledge of reality. It is to demonstrate the indispensable character of the first principles from the most basic through an actual principle of wisdom, God. Subsequently, it is meant to direct progressively to the transcendental nature of reality and to underscore the human mind's crucial position in Aquinas' metaphysical epistemology. It is, therefore, geared towards a meaningful and realistic search into a true/positive growth of the human person towards God, the 'last' fundamental principle (gnoseologically), though the first in absoluteness (ontologically). Consequently, in line with Thomistic texts, we try in this research to set forth systematically and in philosophical order Aquinas' first ontological principles, with the approach he might have used were he to write specifically on ontological *principia prima*.

In an introduction of this kind, a mention about the supportive bibliographic sources would be appropriate. We are thankful to various Thomists and Aristotelian experts whose works helped our analyses. In no small measure, we recognise the resourcefulness of eminent authors like W. D. Ross, J. Barnes, E. Berti, T. H. Irwin, W. Wieland, and prominent Thomists like É. Gilson, J. Maritain, R. Garrigou-Lagrange, C. Fabro, L. Elders, R. McInerny, A. Livi, B. Mondin, L. Clavell, J. F. Wippel, J. Owens, J. J. Sanguineti among others whose works enhanced our investigation. The rigours involved in this work also were facilitated with the aid of the online resource of the *Corpus Thomisticum* of E. Alarcón.

# Chapter 1
# Historical Background

## A. Sophists. Plato. Aristotle

### *A.1 Global View of Sophists on the First Principles*

Ancient philosophy is traditionally chiefly divided into four periods: the pre-Socratic philosophers rank first, followed by Plato, Aristotle, and the post-Aristotelian philosophers.[1] Recently, there is another addition with Christian and Neo-Platonic philosophy. Despite a considerable shift in interest during the past three decades, Plato and Aristotle remain the pillars of ancient philosophy for students and specialists of philosophy alike. This is largely because of the recognition, on the inquirers' part, of the superior quality of the philosophical writings of Plato and Aristotle and the accessibility of their surviving works for critical assessment. Plato and Aristotle have a common tendency to retrospective and prospective investigation in their philosophical approach. Plato has an impressionistic style, while Aristotle moves with historical accuracy and more precision. Looking backwards helps in superseding mythical insights of previous philosophers. By so doing, Plato and Aristotle concretise and metamorphose their philosophy into something enduring with greater vitality.

The above stated relevance of the antecedent and the subsequent philosophers brings the Sophists into play in our treatise. The word 'sophist' from the Greek word *sophia* 'wisdom', is a positive term used to classify the 'wise' and the learned.[2] Nonetheless, a fifth century BCE movement of Greek intellectual revolutionists marred the use of the word so that instead of the positive connotation, it designated a group of propagators of false doctrines about reality and human society. The Sophists had a tendency of sophistication because of their concentrated attention on the problems of knowledge, politics, and

1 As D. Sedley says, there are many ways to divide the history of ancient philosophy. See D. Sedley, "Introduction," in *The Cambridge Companion to Greek and Roman Philosophy*, D. Sedley, ed. (Cambridge: Cambridge University Press, 2003), 7. For the sake of this discourse, we prefer to go with the common one that is also somewhat represented by a renowned philosophical historian, F. Copleston. See also F. Copleston, *A History of Philosophy, Vol.* I (London: Image Book, Doubleday, 1993).

2 See S. Broadie, "The Sophists and Socrates," in *The Cambridge Companion to Greek and Roman Philosophy*, 73.

justice.[3] They were philosophers from various parts of the Grecian world,[4] thought to possess encyclopaedic knowledge because they trained (taught) at a high price and thought it was their responsibility to educate the sons of the Athenian citizens.[5] These Sophists were attracted to Athens due to the favourable attitude of Pericles towards intellectuals; Pericles, on the other hand, was a staunch rationalist whom the Sophists trained in music and political affairs. The major role players among the Sophists were Protagoras of Abdera (c.485–411 BCE) and Gorgias of Leontini (c.485-c.380 BCE), known for their great oratory. They aimed at teaching the youth persuasive methodology on the art of governance, the proper use of words (Eristic method) or their misuse (Sophistic method). 'Sophist', the name, which has remained their identity till this day, came from Plato, an implacable opponent of theirs.[6] And for Aristotle, a Sophist is one who made money by sham wisdom. At their best, the Sophists posed a challenge to the fifth century conventional values.[7] Their desire was that freedom should overcome the standardised values, as a way of leading people to a better comprehension of the universe, the gods, and man. Sophists, then, are parallel to 18th century philosophies of 'Enlightenment'.[8]

Nonetheless, sophistic thought has the significant novelty of the inauguration for the shift from cosmological concepts to a new conception of man. From theoretical natural science, the Sophists turned to rational assessment of human endeavours in order to bring about practical improvement of human life. That upheaval resulted in undermining divine causation which was the only explanation previously given to natural phenomena. This intellectual revolution affected their religious inclination also. On a general note, Sophists were agnostics or

3 See W. K. C. Guthrie, *The Sophists* (Cambridge: Cambridge University Press, 1971), 47. According to W. K. C. Guthrie, one cannot speak of Sophists as a school. The reason is that they have a tendency to individualism, rivalry, and competition. On the other hand, they share more or less the same philosophical outlook, that of empiricism which goes with scepticism. The last reason explains our subsequent use of 'philosophers' for the Sophists. Moreover, S. Broadie in her article overtly affirms that they are philosophers. See S. Broadie, "The Sophists and Socrates," in *The Cambridge Companion to Greek and Roman Philosophy*, 76.

4 Some hailed from the Athenian polis or other city-states, but the majority came from Ionia, in Asia Minor and they were known as travelling teachers.

5 The Sophists taught the skills (*sophia*) in oratory and rhetoric. Since there were no formal schools then, the instructors (Sophists) were peripatetic teachers. Nonetheless, their city-to-city wandering habit partly incurred Plato's derision for them. See W. K. C. Guthrie, *The Sophists*, 40–41.

6 See W. K. C. Guthrie, *The Sophists*, 33–34. See also Plato, *Sophist*, 218b–233c for a serial categorisation, which culminates in uncomplimentary interpretations of the Sophists.

7 There is a marked antithesis between nature (*physis*) and convention (*nomos*) for the Sophists. See J. Dillon and T. Gergel, trans. and eds. *The Greek Sophists* (London: Penguin Books, 2003), xiii–xv.

8 See G. B. Kerferd, "Sophists," in *The Encyclopedia of Philosophy*, Vols. VII and VIII, P. Edwards, ed. in chief (London: Collier Macmillan Publishers, 1967), 495.



atheists because they mostly saw the world as operating on the principle of natural causation.[9] In fact, the Sophists spearheaded an indifferent attitude to the problem of the material world with emphasis of interest transferred to man. Even so, the sophist inquiry had its terminus at the level of sense impressions and experiential (empirical) data. Knowledge for the Sophists implied only the immediate and was non-rational.[10] Thus, they saw and judged every reality from the empirical perspective. Most Sophists claimed they taught *aretê* ('excellence') in public management as well as individual affairs.[11] Though there were differences in specific materials each Sophist tended to teach, their predominant characteristics were scepticism and relativism of absolute truth and independent reality. Since truth is what it appears to be to the individual who assesses it, there is nothing with an inherent truth-value like the first principles. The first principles would be something likened to an obsolete and mythological view the Sophists tried to supersede. Hence, Aristotle says the Sophists often turn towards the accidents, which implies turning back to something close to 'non-being'.[12] From this stems the fact that Sophists negate objective reality. Since 'being *qua* being' of Aristotle addresses reality as it is, which is discernible from the objective 'truth' seen also through the first principles of being, Sophists deny the first principles. As relativists, Sophists reject universal or absolute truth; they abandon science, philosophy, mathematics, and ethics and lend credibility only to the subtle art of persuasion.[13]

It was Socrates and his adherents who later introduced the rational aspect of knowledge for a balanced inquiry. Logically, the Sophist movement resulted in relativism of knowledge and scepticism[14] and remained unsatisfactory; on the other

9 Sophists, thus, helped people in their epoch to overcome the mythological understanding of gods, universe, and man. Sophists gave little or no room to the old anthropomorphic gods. However, since Sophists and their students constituted an intellectual minority of the ancient Greek populace, Sophistic scepticism did not dominate in the society; if anything, the ordinary majority regarded the Sophists as impious and irreligious.

10 A world where real knowledge is emasculated demonstrates absolute subjectivism of the real and any individual is free then, to purport his or her own body of knowledge and impart it on others so long as he/she has the power of persuasion. This kind of society, in fine, will lack order, justice, focus, and 'objective truth' since everything and reality itself depends on individual judgments for its justification.

11 See M. Gagarin and P. Woodruff, trans. and eds. *Early Greek Political Thought from Homer to the Sophists* (Cambridge: Cambridge University Press, 1995), 181–184. See also Plato, *Protagoras*, 324d 2–328c 2.

12 *Met*, VI, 1026b, II, 5.

13 Sophists claim to bring about or pass on 'knowledge' but they end up teaching their own principles, because without believing in any guiding principle, they contradict themselves and manipulate what they term as principles.

14 The 'man-measure' i.e. that "man is the measure of all things ..." of Protagoras and the 'nothing exists' of Gorgias were born out of this tendency. Everything hence becomes relative. Reality, in effect, becomes subjective to experience data. This 'nothing exists', "if something exists, we cannot know it; if we know it, we cannot teach it to others" has scepticism as its end

hand, however, it culminated in the lofty conjectures of Plato and Aristotle. And so, we move on succinctly to Plato, one of the champions of classical Greek philosophy.

### *A.2 Plato (427–347 BCE)*[15]

We begin our main treatise with Plato because he is the first monumental ancient Greek philosopher who leaves us with a set of writings that covers a wide range of arguments still discussed today by modern scholars in the area of metaphysics, epistemology, ethics, politics, language, mathematics, religion, etc. There is need here to stress that Socrates, one of the first prominent ancient Greek philosophers, has no written memoirs. All we eventually know about Socrates comes from Xenophon (430–354 BCE) and Plato. Though Xenophon has four brief portraits of Socrates, Plato exposes the principal thoughts of Socrates. This explains why we have chosen to begin our discourse with Plato who is also one of the most famous Greek philosophers after Socrates.

Plato, the disciple or student and mouthpiece of Socrates, was twenty-eight when his master (Socrates) was put to death. In 387 BCE Plato (then, at forty) began the Athenian Academy for youths. Since Plato uses Socrates as the speaker for most of his many dialogues, our knowledge of Plato's hypotheses, therefore, mirrors Socrates' own. Hence, it is difficult to draw a line on what is Plato's personal opinion and that of his master. This is because, as many authors (e.g. N. Smith et al.) certify, one cannot easily determine when the real opinion of Plato is represented.[16] And so, in an attempt to interpret Plato, some problems normally surface. Such difficulties when expressed in questions could be: Is Socrates the historical predecessor of Plato? Is Plato just representing this Socrates' views in some of his (Plato's) works? Does Socrates only articulate Plato's mindset or his own also? Is the Socrates of the Plato's dialogues an imaginary being? etc. Given the preceding uncertainties, we establish that our examination of Plato's proposals here necessarily includes Socrates' even when not mentioned. Nonetheless, for

result. If reality is relative to and the fruit of empirical knowledge, there is then no intelligible reality. If it exists at all, it cannot be known the way it is because we witness only to immediate sense impressions and we cannot count on these as reliable and objective because they are tentative. With this flows also the logic that we cannot impart knowledge on others because there is no real knowledge of anything. Therefore, the only thing left is the use of the word, and according to Gorgias, everything can appear to be true and just, if one has the oratorical power to convince others that it is so; thus, reality only becomes the product of the persuasion.

15 There is a discrepancy among modern scholars on the actual birth date of Plato because of differences in ancient sources. For the sake of this paper, we followed W. K. C. Guthrie, *A History of Greek Philosophy*, Vol. IV (Cambridge: Cambridge University Press, 1975), 10.

16 See N. D. Smith, A. Vaidya and F. Allhoff, *Ancient Philosophy: Essential Readings with Commentary*, eds. N. D. Smith, A. Vaidya and F. Allhoff (Oxford: Blackwell Publishing, 2008), 66.



Aristotle it is obvious that the *Republic*, one of Plato's wide-ranging dialogues, is a representation of Plato's philosophy more than that of Socrates. Hence, Aristotle makes a distinction between the historical Socrates and the Socrates who is Plato's interlocutor.[17] However, it is not part of our main concern in this inquiry to decipher what originally belongs to Socrates and Plato's addendum, since for us, both discourses are under one theme. In view of this background and précis, let us have a rundown of Plato's philosophical outlook to enable us to give a global consideration to his principle-like propositions.

#### *A.2.1 A Synopsis of Plato's Philosophical Enterprise*

A proper and adequate consideration of Platonic propositions necessitates also a mention of his style. Plato utilises the Socratic dialogic and dialectical style that involves question and answer all through his works. To arrive at a conclusive response, Plato argues the two sides of a question and with the answer he contends further for another hypothesis. The reason is seemingly that since Plato holds that 'knowledge' for man is 'recollection,' that is, that "man is born with knowledge in the mind," the dialogic questions are meant to pull out truths, wisdom, and answers already pre-existent in man's mind. Consequently, man, by implication, studies, observes, and learns nothing new.

Further, Plato habitually employs metaphorical maxims in his philosophical dialogues to convey his ideas. Without a consciousness of this fact, one can easily be overtaken by the conversation and let go of the actual information. Plato loads the allegorical style with much stimulating philosophical fantasy. Unlike other philosophers of his day and most renowned philosophers, therefore, Plato presents his philosophy under a creative cloak.[18]

17 Aristotle for instance in the *Metaphysics* (VI, 987b 18–21) attributes to Plato the theory of the elements of the Forms, the Great and the Small, which constitute the material components-unity that is substance. We highlight this for its significance because it is a pointer that in Plato's estimation the Forms are not essential units. They are derivations of some basic elements. We are confronted here with a view of what we might term Plato's deepest thought about reality because it posits a thing more fundamental than the Forms. If that is the case, we then infer that the Forms cannot serve as first principles, since the latter are basic determinants of subsequent principles. Aristotle also observes in (*Met*, XIII, 1078b 12–32) that: "… It was reasonable that Socrates should seek the essence (*to ti estin*). For he was seeking to deduce, and essence (*to ti estin*) is the first principle of deductions. … For there are two things that may be fairly ascribed to Socrates–inductive arguments and universal definition, both of which are concerned with a first principle of scientific knowledge. But Socrates did not separate the universals or the definitions. His successors, however, did separate them, and these were the kinds of beings they called forms." It is noteworthy to mention that Aristotle believes in forms (with a small F), but he does not consider them as transcendent objects or archetypes. Little wonder, therefore, as we shall shortly see, that the first principles, as such, have an Aristotelian origin.

18 See R. Kraut, *Plato*, ed. E. N. Zalta, September 17, 2009, <http://plato.stanford.edu/entries/plato/> (accessed September 15, 2010).

Often, Plato's dialogues exhibit a high level of obscurity for comprehension, even in his most accredited doctrines. The reason is that as Plato is gifted with a great sense of creativity, most of his works are constructed under such poetic and dramatic manner. In the *Republic*, for instance, Plato depicts the form of the good as something mysterious whose actual nature is evasive and is as yet undiscovered. In addition, among the celebrated philosophers, Plato's works demonstrate him to be more exploratory, elusive, and incompletely systematic. As such, we observe that what readers generally get from Plato is a key idea on how to unravel the rest. Besides, his notions introduce the readers to various suggestions on how to get to the end of the inquiry rather than arriving at the terminal of the interrogation with them. This implies that Plato draws his readers into self-help in thinking through a problem, thereby, bringing them to learn from this design. Through this methodology Plato portrays philosophy as a living and unfinished project, soliciting each person's contribution. Subsequently, most of Plato's dialogues in some way leave some work for the readers to accomplish.[19]

With this short exposé in view, let us examine the notion and place of the first principles in Plato's philosophy.

### *A.2.2 An Overview of Plato on First Principles*

It is expedient from the outset to affirm that Plato has no explicit theses on the first principles. In one of his most cited and enduring dialogues, the *Republic*, Plato discusses a number of issues that one can suggest are akin to the first principles. Many scholars regard the *Republic* as a key to a perfect future society. It is an incomplete but indispensable representation of Plato's philosophy.[20] In actual fact, the *Republic* according to Plato is a dialogue whose discussion is geared towards the construction of a holistic society; one in which the mental, physical, and spiritual growth are of vital importance.

Part of the dialogue in the *Republic* addresses metaphysical questions that confront inquiries of an epistemological nature.[21] Parmenides' influence on Plato

19 See R. Kraut, "Plato," in *Stanford Encyclopedia of Philosophy*.

20 See R. Kraut, "Introduction to the Study of Plato," in *The Cambridge Companion to Plato*, R. Kraut, ed. (Cambridge: Cambridge University Press, 2006), 10.

21 On the epistemological metaphysics in the *Republic* see Plato, *Republic* 479a–e, especially c and d, wherein Plato says: " '... For the many are also ambiguous, and it's not possible to think of them as either being or not being, or as both or neither.' 'Can you do anything with them?' I said. 'Or could you find a finer place to put them than between being and not to be? For the presumably nothing darker than not-being will come to light so that something could *not be* more than it; and nothing brighter than being will come to light so that something could *be* more than it.' 'Very true,' he said. 'Then we have found, as it seems, that the many beliefs of the many about what's fair and about other things roll around somewhere between not-being and being purely and simply.' ... 'And we agreed beforehand that, if any such thing should come to light, it must be called opinable but not knowable, the wanderer between, seized by



is richly felt in the said dialogue. Evidently, one of the things Plato plausibly picks from Parmenides is the argument that there is and could be only one thing, that is, 'being'. According to Parmenides, since change implies coming to 'be' another thing that the 'being' was not originally, it then means that nothing actually changes. Hence, reality is static; the appearance of change is only a deception.[22] This Parmenides' account of 'being' probably contributed to Plato's theory of Forms,[23] that is, one of Plato's theories closely likened to the first principles. The mentioned theory of Forms or Ideas[24] typically refers to Plato's doctrine that the real world is higher, independent, and different from the material world of phenomena.[25]

Heraclitus' notion of 'flux' contrasted with the above on one 'being' is apparently another great impact on Plato in the section of Plato's dialogue concerned mainly with material objects. Reality for Heraclitus is in constant change; as a result, the only constant is the pattern of change itself. To say that there are things which do not change, is, according to Heraclitus, an illusion. Therefore, with Heraclitus, Plato accepts that objects of sense perception are always in a state of 'becoming' and of 'flux'; thus, they are not fit to be the objects of true knowledge. Subsequently, Plato thinks that objects of sense perception come into being and pass away. They are indefinite in number, cannot be clearly defined, and are incapable of being objects of scientific knowledge;[26] hence, by implication, they cannot be guiding or first principles of anything because they are unreliable.

the power between.'..." Cited from Plato, *Republic*, 2nd ed. A. Bloom, trans. and notes (New York: BasicBooks, 1991). See also *Republic*, 476d–477a; 484c–d, 500c; 523b–c; 524d–525a; 534b etc.

22 We cannot be clear about Parmenides' one 'being' since the little he left is insufficient to decide whether there is just an item, 'being' (in the strict sense of numerical monism) in Parmenides' universe or simply a kind of thing ('beings' or things that are).

23 We observe here that Plato's discussion on the Forms lacks complete coherence in most of his dialogues. On this issue, there are divided opinions among scholars. People like R. Kraut think there is a progression in the development of Plato's theory on the Forms, etc. despite obvious discrepancies. See R. Kraut, "Introduction to the Study of Plato," 18ff.

24 The Forms are sometimes called Ideas; Plato's word is *eidos*, which translates into English as 'Ideas'. However, this gives a wrong idea of Plato's Forms.

25 By extension, the Ideas may serve as the principles of the sense phenomena. Nevertheless, since Plato's submission on this theory in his different dialogues is variable, it is a slippery ground for us to strongly make this assertion.

26 We find the problem of inconsistency also in Plato's account of knowledge, because while this doctrine is regarded as uncomplicated in the *Republic*, it is scrutinised in *Parmenides* (126a–135d) and becomes difficult to define in the *Theaetetus*. According to R. Kraut it reflects a dramatic structure in Plato's middle period dialogues. See R. Kraut, "Introduction to the Study of Plato," 16ff.

The aforesaid demonstrates why, with Pythagoras, Plato believes in the relativity of sense and sense perception.[27] According to Plato, sense perception is elusive and subject to all sorts of temporal influences. This does not imply universal relativism; on the contrary, Plato holds that true knowledge[28] is essentially abiding and stable, it is attainable through judgments concerning universals. For Plato, then, true knowledge that is absolute and infallible is attainable. It is knowledge of the real, explicable in the Forms.[29] In line with this view, Plato asks several questions in an attempt to portray the exact picture of true knowledge. For instance, in the *Republic* Plato poses questions, such as: What is knowledge? What is reality? What is illusion? How do we know? What nature of things can we know? What makes a thing what it is? Through the questions, Plato makes a distinction between the reality of sense perception and the essence of that reality, which is the Form. Put in another way, Plato advocates that reality is not constant, it changes; in consequence, knowledge of reality is individualistic and particular to the one who knows; it is not a universal knowledge. Thus, utilising the wisdom of Socrates and Parmenides, Plato argues that objective reality is knowable only through the mind.[30]

Plato's idea that reality is unavailable to the senses puts him at odds with common man/sense. Thus, Plato says that one who sees with his eyes is blind; this notion is mostly expressed in the allegory of the cave[31] and more precisely in

27 Plato actually espoused the Pythagorean principles of Limit and Unlimited to an extent; however, it is not without reason and there are nuances of difference between them. In the *Timaeus* (52d–53a), for example, we find the description of pure 'flux' in existence before the ordering of the phenomenal world by determinate Forms. Besides, in the sensible world, there are manifestations of the Great and the Small in diverse forms in continua devoid of internal limits. In contrast, the Pythagoreans regard the Great and the Small as principles of evil contrary to the good principle of Unity and Limit. See also J. J. Cleary, "Aristotle's Criticism of Plato's First Principles," in *Pensees de l'Un dans la tradition philosophique* (Les Presses de l'université Laval, 2004), 70–97.

28 In many places, Plato has the view that possessing knowledge involves having the capability of reasoning about it or the ability of giving an account of it; conversely, mere possession of belief demonstrates the absence of such capacity. See: *Republic*, 531e, 534b: see also 475c, 493c, 497c, 510c, 533c; *Gorgias*, 465a, 500e–501a; *Meno*, 98a; *Phaedo*, 76b; *Timaeus*, 51d–e. See also: R. Kraut, "Introduction to the Study of Plato," 47 endnote.

29 According to Plato, the Forms are, above all, the causes of all our knowledge of all objects. Plato's Forms supply orderliness and intelligibility to all objects.

30 Plato's conception, therefore, is that the intelligible world is Parmenidean, while the visible cosmos is Heraclitean. In the intelligible realm, Plato hypothesises the Forms as objects of knowledge. Hence, Plato's metaphysical theory is designed to fit epistemological requirements.

31 Plato's *Republic*, 514a–519a. The allegory of the cave is an analogy in which Plato proposes that the most intelligible world is the invisible world and the most obscure and least knowable is the visible world.



the chronicle of the divided line. Plato develops the theory of the Forms or Ideas in his middle-period dialogues (especially *Phaedo*, *Symposium*, *Republic*), what he also criticises in the *Parmenides*.[32] According to Plato, the physical realities are shadows and phenomena of the ideal or perfect Forms that are 'Archetypes'[33] or abstract representations of the universals of things in the material world. The existence of the physical objects instantiate their perfect Forms[34] whose nature is unchanging, absolute, and universal.

By this hypothesis, Plato postulates that although there are beautiful, good, and just things in our phenomenal society, they are tentative compared to the Good.[35] The good life, which is the ultimate truth, implies living in accordance with these universal standards.

Plato seems to suggest that his question of the One and Many[36] that arises in both the sensible and especially at the intelligible level can be tackled by the dialectical technique that involves a conjecture of a definite number of Ideas between the initial one and myriads of particular ones.[37] Hence, we can justifiably infer that Plato's guiding principle here is that anyone starting from some unity should not abandon it immediately to turn to the infinite. Instead, he should turn to definite numbers (the Ideas), and whoever, on the other hand, begins with the infinite should not turn to the one right away but should try to establish a definite plurality before the attainment of the one, etc. This is a typical mixture of Plato's

32 The above demonstrates clearly the inconsistency we already underlined in Plato's account of the Forms/Ideas.

33 Some scholars like W. D. Ross and S. M. Cohen think that these archetypes are Plato's original causes of 'being' (which we can liken to the first principles), for Plato's Forms are not mental entities, nor even mind-dependent. They are independently existent realities whose existence and nature are understandable only by the mind, even though these entities do not depend on the said understanding for them to 'be'.

34 We can sum up the puzzling characteristics of Plato's Forms, as follows; they are transcendent, independent, pure, ultimate reality, and causes of the existence of all objects in the physical world and their intelligibility. Plato's Forms are also systematically unified. [As a result of the above-mentioned hypothesis, some Platonic scholars think that this epistemological and metaphysical allegory is intertwined with Platonic notion of political ideology in the proposition of 'Philosopher-King'. We will not go into this discourse because it is outside the scope of our inquiry here. As a matter of fact, this forms part of the mystery of the material and spiritual convolution of Plato's metaphysics.]

35 In Plato's moral concept, the Form of the Good is at the peak of the hierarchy of Forms, enlightening all others. The Forms are objects of recollection.

36 A popular passage in the *Republic* (596a) suggests that Forms play a semantic role ("there is one Form for each set of many things to which we give the same name"). We can ascertain from the foregoing also that the Forms undertake dialectical roles.

37 See *Philebus*, 18a–b.

conception of the Ideas that led him to launch the idea of the intellect (*nous*)[38] as a cause of combination and separation.[39]

Nevertheless, some modern scholars, like John J. Cleary observe that despite the Aristotelian criticism of Plato in the One and the Indefinite Dyad and other principle-like views, there is a notable absence in Plato's dialogues of detailed discourse of the highest principles of 'being'. Similarly, J. J. Cleary acknowledges the fact that *Philebus* discusses Limit and Unlimited as elements of reality and that the *Republic* highlights the existence of a highest principle of reality, which is the Good that we have already mentioned.[40] This strengthens our opinion that the nature of all Plato's proposals, if anything, lacks consistency to stand as real first principles. We can also suggest from the aforesaid that Aristotle's criticism of Plato may be somewhat ambiguous since both are relatively opposed contextually.

### A.3 Aristotle (384–322 BCE)

We come to Aristotle, a towering figure in ancient Greek philosophy and the architect of the first principles, who was also one of Plato's best students. We emphasise here that our discussion of the Aristotelian first principles will be extensive because, in addition to Aristotle being the architect of the first principles in classical philosophy, Thomistic realistic philosophy on the first principles had

38 See *Philebus*, 23d. See also: J. J. Cleary, "Aristotle's Criticism of Plato's First Principles," 75. [*Nous*, a Greek word, generally translated as 'intellect' or 'mind', plays a key role for some ancient Greek philosophers such as Plato, Aristotle and Plotinus. *Nous*, more than other Greek words that translate also as intellect, has a special significance because of the value accredited to its activity and the metaphysical quality of *noetic* (intelligible) objects. In the later dialogues of Plato and more scientifically in Aristotle and Plotinus, *nous* is not just equated to the highest activity of the human soul but also is regarded as a divine and transcendent principle of cosmic order. However, in its pre-philosophical treatment, *nous* is only an expression for the mind. *Nous* is principally distinguished from other similar words at that point by its intelligent activity, rather than the general mental processes.] For further reading, see A. A. Long, "Nous," in <http://www.muslimphilosophy.com/ip/rep/A075>, (Routledge, 1998), accessed August, 2010; and T. H. Irwin, "Aristotle" (384–322 BC), in <http://www.muslimphilosophy.com/ip/rep/A022.htm#A022SECT19>, (Routledge, 1998), accessed August, 2010.

39 One of Aristotle's outstanding criticisms of Plato is that he identifies the doctrine of Platonic Forms with a basic separation in the following: "Those who talk about forms do not notice that they too are doing this: they separate the objects of natural science though they are less separable than the objects of mathematics" (*Phys*, II, 193b 35–194a 1). Consequently, at least according to Aristotle's observation, separate forms result from a Heraclitean notion of flux and the Socratic hypothesis of scientific knowledge whose first principles are definitions of universal essences. We are not concerned about the correctness of this Aristotelian view in this discourse; we only highlighted that partly because it contributed to Aristotle's modelling of the doctrine of the first principles.

40 See J. J. Cleary, "Aristotle's Criticism of Plato's First Principles," 72ff.



their base on the Aristotelian notion. Just as a strong building cannot exist without a fortified foundation, in the same way, the first principles of Aquinas would not have had their worth without reference to the Aristotelian background on which they are founded.

Aristotle was a prolific and erudite writer that radically transformed almost all areas of knowledge he embraced. He was more empirically minded than Plato and is noted for his rejection of Plato's theory of Forms.[41] Aristotle was the first to categorise spheres of human knowledge into distinct disciplines, such as biology, mathematics, physics, and ethics. It is interesting to note that some of these classifications are still in use today. He was the father of formal logic, and thus became the first to develop a formalised system for reasoning.

#### A.3.1 A Global View of the First Principles in Aristotle's Works

Aristotle, like Plato, believes in the orderliness and beauty of the world. On account of this order in the cosmos, reality is intelligible. This intelligibility is explicable by the perceiving intellect, or the intuitive reasoning (*nous*),[42] which possesses the capacity of grasping the truth about the world's comprehensibility.[43] This is not without reasons or causes (*aitíai*)[44] because we know and understand something when we grasp its cause or the 'why'.

With the above in mind, we consider it expedient, at this point, to note that an important interpretation of Aristotle's metaphysical assumptions, especially his first principles, cannot evade *nous* because of its vital role in most of Aristotle's discourses. In effect, an interruption here is necessary to accentuate that Aristotle

41 Though Aristotle accepts the forms, his notion is quite different from Plato's whose belief is that properties, such as beauty are abstract universal entities that exist independent of the objects themselves. Aristotle, on the other hand, affirms that forms are intrinsic to the objects and have no existence apart from the objects, and so the forms must be studied in relation to those substances. (Our use of small letter 'f' for the forms here is purposeful because of Aristotle's own concept about them, which is ordinary).

42 Reason (with the German meaning, *Vernunft*) is the intellectual capability to apprehend truth cognitively, either instantaneously in 'intuition', or through a process of inference, while intuition (with the Greek as *noesis*), is a direct, non-inferential knowledge of concrete truths or abstract substances. When we then talk about intuitive reasoning, it is interchangeable with the Aristotelian understanding of *nous*. As we mentioned in footnote above, it is obvious that Plato's use of *nous* makes an impact on Aristotle.

43 See *APst*, 100a 6–100b 5; 84b 31–85a 1.

44 *Aitía* (*causa* in Latin) has the Aristotelian definition as an answer to the question 'why'? The sense of the usage of *aitia* here implies the 'cause of' or 'reason for', which explains the 'why' not as an entity. For further reading, see J. Casals and J. Hernàndez Reynés, *A Note on the use of Aitia and Aition in the Metaphysics of Aristotle*, Universitat Autònoma de Barcelona, in <www.hipatia.uab.cat/documents/aitia.pdf>, accessed August, 2010; See also E. Berti, *Aristotele: dalla dialettica alla filosofia prima* (Padova: A. Milani, 1977), 304 ff.; and W. Wieland, *Die aristotelische Physik* (Göttingen: Vandenhoeck & Ruprecht, 1962, 1970), 232–233.

brings *nous* to its transcendent status. Generally, Aristotle's model of the soul depicts psychic functions as realisations of physical potentials. Contrasted to his general approach, Aristotle singles out *nous* as having no actual existence before thinking and, hence, lacks a corresponding organ as we see in perception whose organs are the senses. Aristotle in line with Plato connects *nous* to the 'forms', that is, the essences of material objects, but he does not dissociate it as Plato did from the things themselves. For Aristotle, *nous* implies concrete 'thought objects' because it is actually identical to the object thought. Moreover, in Aristotle's view, *nous* works with the support of data supplied from the soul's capability of sensory perceptive representation, that is, the 'phantasm' (imagination). We underscored this fact in Aristotle's conception of the *nous* because of its close interrelatedness with the first principles. Let us then continue with our treatise having this laconic remark in view.

Aristotle argues extensively on the first principles, so we think it is not an overstatement to suggest that he is the man of the first principles in ancient Greek philosophy. Hence, the present inquiry highlights mainly the first principles (*archai*) of Aristotle before proceeding to Aquinas' understanding and application of these first principles as an offshoot of the Aristotelian origin. There are various interpretations about Aristotle's conception of the *archai* or 'starting-points.'[45] We understand things, then, because we can trace them back to their beginnings (not chronological but causal sources). Life is meaningful if we can trace it back to a causal origin and justify its end. These 'origins' are the explanations of the 'why' in every reality.[46] Aristotle uses the word *archê* to refer to fundamental and prime things. Aristotle also employs the term *archê* for propositions, but this sense of the usage is secondary to the former usage. The reason for the priority of the first implication of *archê* is that it refers to a metaphysical principle (fundamental notion), while the latter implies a propositional principle. A propositional principle is regarded as one so long as the proposition illustrates an actual principle as in the *Analytics* (*Prior and Posterior*) and the *Topics*.

Diverse philosophical issues arise in connection with the Aristotelian first principles. Some have attempted to cast them aside as non-relevant in the contemporary philosophy or science. How true is this conception? Are the first principles not of any use? Why does Aristotle dedicate so much time to the first principles and attach considerable importance to them if they are so unnecessary? These are the questions that require explanatory reasons (*aitíai*) in our cursory examination.

45 The Greek word *archai* (beginnings, origins) translated by most philosophers in English as *the first principles* are also regarded as the 'starting-points' by De Rijk. He believes the expression is used to indicate that the first principles enjoy absolute priority to things they try to demonstrate. See L. M. De Rijk, *Aristotle: Semantics and Ontology,* Vol. I (Leiden: E. J. Brill, 2002), 726–749.

46 See *APst*, 72b 9–12; 94a 20; *Met*, I, 981a 24–30; I, 982b 2–4.



Aristotle presents the first principles as an all-embracing theory. In most of his significant works, starting from the *Topics* and the *Analytics (Prior and Posterior),* through the *Physics and Metaphysics*, to his *Ethics (Eudemian and Nicomachean),* and some of his minor works, Aristotle shows a unity of thought in his doctrine of these first principles.

However, some authors think that Aristotle's thought about first principles does not present a unified doctrine. Irwin, one of the most celebrated exponents on the first principles, and others, like Flamarique and MacIntyre, believe that Aristotle's hypothesis of the first principles expresses one central view: (which is, that) reality is holistic and intelligible. Nonetheless, the Aristotelian exposition of the first principles as found in every aspect of human endeavour leaves the puzzle about the systematic style of his proposal. To this, we immediately say that some renowned commentators, like W. D. Ross, have identified a non-systematic methodology in Aristotle's works, because of the vast nature of so many of his works. In the light of the above, let us briefly discuss Aristotle's presentation of the first principles in some of his works.

### *A.3.2 Aristotelian Presentation of the First Principles in the Sciences, particularly in the Analytics*

We shall occupy ourselves here with Aristotle's development of the first principles as represented in the sciences,[47] which featured mainly in his works, the *Analytics (Prior and Posterior).* In these works, Aristotle's discourse on the first principles centres on common or general principles he considers the foundations of the sciences, wherein lie the *common principles* (*axioms*), *definitions*, and *hypotheses*. In Aristotle's conception, science is born when one moves from 'that' (*to hoti*) to 'why' (*to dioti*). In all, the metaphysical, which is the PNC, is always supposedly fundamental, because without it any attempt at a demonstration would be in vain and nothing is meaningful. This is supported by Aristotle's argument in the *Topics* that it is true and first, the principle that possesses its own certitude and is not dependent on the strength of another.[48]

Scientific propositions correspond to objective reality, which is a kind of logical reality that is independent of our beliefs about it. Science is interested in universal truths and not in particular ones: universals, then, form the primary quest of a science.[49]

47 Science in an Aristotelian sense is all-inclusive. Subsequently, under this sub-title we shall look at the Aristotelian notion of first principles in mathematics, logic, general sciences, etc.

48 See *Top*, I, 1, 100a 30. See also G. Cenacchi, "Il principio di non-contraddizione, fondamento del discorso filosofico," in *Aquinas* 16 (1973), 255–277.

49 See *APst*, 77a 5–9; 83a 30–35; 85b 15–18; *Met*, III, 1003a 14–15; XI, 1059b 24–27.

If objective reality implies truths about universals, then universals must be asserted as existent. Aristotle's universals differ largely from the Platonic conception of universal Forms, which have existence independent of particulars.[50]

With Irwin we think that the *Posterior Analytics* is a description of the structure of a science and the scientific propositions contained in it. In asserting that a science gives explanations, Aristotle tries to assume the actuality of the universals. Aristotle further claims that universals are better known by nature than the particulars. Since Aristotle demands that scientific propositions should be about universals, he does not accept that singular statements about particulars form part of a science. Aristotle's premise is intelligible if we take the explanatory role of the sciences into consideration. Therefore, since scientific statements are explanatory, they must be about universals.[51]

In all, Aristotle aims at *epistêmê*, the scientific knowledge that is manifest in the structure of the demonstrative model of the *Analytics*, which entails a progressive move from 'what is known to us' to 'what is known by nature'. In this demonstrative process, we see Aristotle explicate the knowledge that is attained by successful inquiry, instead of a system of scientific inquiry that begins from appearances. According to Aristotle, the process of justification must be linear and finite, otherwise, the justification procedure leads to infinite regress, which ends up as no justification. To avoid infinite regress or circular justification, then, Aristotle recommends that real justification must necessarily lead to primary principles of science. These first principles of science, 'hypotheses' (assumptions), are better known and prior to other truths of science and are not derivable from other scientific principles. Hence, Aristotle asserts that these principles cannot be demonstrated because they are the foundations of all scienctific demonstration.[52]

Aristotle proposes also that these first principles of science can be reached from the starting points known to us, which means perceptual and/or dialectical appearances. It is, therefore, apparent that Aristotle believes that the relation of the principles to the appearances serve as a justification to us for their acceptance and to affirm them as first principles. It is difficult to blend this explication to the aforementioned Aristotelian requirement of the linear and finite justification procedure. Consequently, Aristotle's aspiration of arriving at a demonstrative science, obviously uncovered in some of his epistemological propositions and hypotheses, is virtually unpronounced in the composition of most of the surviving works.[53]

50 See *APst*, 77a 5–9; 83a 22–25.

51 See *APst*, 85b 23–26. For more elaboration on the description of science and the universals, see also T. H. Irwin, *Aristotle's First Principles*, Reprint (Oxford: Clarendon Press, 1990), 118–120.

52 See *APst*, 99b 15ff.

53 Reading through most of the Aristotelian principal philosophical treatises, it is perceptible that the influence of dialectical methods is more evident.



Aristotle's hypothesis is that the definition of an object is not the same as the assertion of its existence.[54] There is need for the proof of the object and its assumption. The first principles in Aristotelian perspective are self-evident propositions (*per se nota*) understood alongside with their terms. To impart them to others, one needs only to demonstrate the implication of the subject and the predicate since the definition of the subject includes that of the predicate.

We concur with Barnes'[55] observation that Aristotle made no attempt to co-ordinate his diverse taxonomy of the elements of the demonstrative science that he (Aristotle) introduced. This, in effect, makes it difficult to systematise Aristotle's argument on the first principles of science. Barnes also assumes that the Aristotelian sciences are properly expounded in formal axiomatised systems. For Barnes, what Euclid later did, haltingly, for geometry, Aristotle desired to be done for every aspect of human knowledge. The sciences are to be axiomatised: that is to say, the truth that each defines should be displayed as a sequence of theorems drawn from a few fundamental postulates or axioms. The axiomatisation, then, is to be formalised. This implies that its sentences should be formulated in a definite language and its arguments should proceed according to an accurately and explicitly specified logical set of laws.[56]

Barnes' further conviction is that the notion of formal axiomatisation (chronicled in the *Posterior Analytics*) has not just a historical but also an indispensable value especially in the development of the axiomatic science of the present day. For Aristotle also asserts:

> And, at the same time, in what way can there be a science of the first principles? For we are aware even now what each of them in fact is (at least even other sciences use them as familiar); but if there is a demonstrative science which deals with them, there will have to be an underlying kind, and some of them must be demonstrable attributes and others must be axioms (for it is impossible that there should be demonstration about all of them); for the demonstration must start from certain premises and be about a certain subject and prove certain attributes. Therefore it follows that all attributes that are proved must belong to a single class; for all demonstrative sciences use the axioms.[57]

It is necessary, therefore, to note from the outset that the question of axioms is debatable in the contemporary context. Nevertheless, for several centuries, geometry enjoyed a broad acceptance. Geometrical science seemed to suit perfectly

54 See *APst*, 76a 31–77a 4.

55 See J. Barnes, *Aristotle's Posterior Analytics* (Oxford: Clarendon Press, 1975), 138–139.

56 See J. Barnes, *Aristotle's Posterior Analytics*, xi.

57 *Met*, III, 997a 3–10.

the best model of a deductive structure based on first principles, in which a small set of axioms are the ultimate sources of all the theorems. Aristotle believes that first principles of science are equally 'self-evident'. This Aristotelian conception implies that we intuitively know the first principles to be true only by perceiving them by *nous* ('mind').

Aristotle considers a well-defined term as a definition "through what is prior and more familiar" just as an appropriate demonstration of a sentence is "through what is prior and more familiar". As Aristotle requires also 'natural' priority and evidence in a premise for a conclusion, so also does he require that the elements in a strict definition should enjoy more natural priority and greater intelligibility than terms defined.[58] Since the axioms should be immediately evident, so also the primitive terms should possess the quality of immediate intelligibility. This is by way of inference and not explicitly from Aristotle. For it is necessary to suppose the fulfilment of the postulate in the primitive terms if one should deduce the essential sentence.[59] There is a confirmation of an ascription of *evidentia ex terminis* to the axioms of a science by the sentence. With the parallel in Aristotelian theory between terms and axioms, as already shown, one can see that the function duly belongs only to immediately intelligible terms. This is because the propositions of axioms on those terms are also immediately manifest. For Scholz, therefore, all that can be said on Aristotle's principle of evidence is *mutatis mutandis* about the Aristotelian supposition of intelligibility.[60]

Furthermore, we think in line with Barnes that Aristotle's main focus in the *Posterior Analytics*, principally in the first eight chapters of the first book, is an illustration of a hypothesis of *apodeictic* or demonstrative science. The mentioned assumption concerns logical forms which the sciences must or do exhibit. Hence with Aristotelian commentators, such as Barnes, we hold that:

- A demonstrative science is an axiomatised deductive scheme that is composed of a finite set of connected *ἀποδείξεις* or demonstrations.[61] According

58 See the entire *Top*, VI, 4. It is a non-permissible blunder according to Aristotle if one has not made the definition through what is prior and more familiar (141a 26ff.). According to Aristotle's notion, there is only one proper definition of any type of thing, i.e., the one that corresponds with the 'natural' arrangement of the concept in view. See *Top*, VI, 141a 35: "... for of each real object the essence is single." It is interesting to note this Aristotelian metaphysical formulation on Aristotle's views on 'nature'. For modern axiomatic theorists, this can be a shock. Pertaining to terms, some prefer *gnôrimos*, which is 'intelligible' rather than 'evident'. This is because we speak of 'intelligibility' in 'terms' and not of 'evidence' when we intend to speak about the signification of 'terms'.

59 See *APst*, 72b 23 ff.

60 See H. Scholz, "The Ancient Axiomatic Theory," in *Articles on Aristotle, 1, Science*, J. Barnes et al., eds. (London: Duckworth, 1975), 60ff.

61 See J. Barnes, "Aristotle's Theory of Demonstration," in *Phronesis* 14 (1969), 123–152.



to Aristotle also "deduction should be discussed before a demonstration, because deduction is the more general."[62]

- "A demonstration is a sort of deduction" (syllogism).[63]

At this juncture we observe that there is a parallel between Aristotle's and Euclid's account of first principles also affirmed by eminent Aristotelian scholars like Lee.

Contrary to mere opinion, scientific demonstration gives strict knowledge; consequently, the 'first principles', the premises from which such demonstration starts, should have the following characteristics:

- The quality of truth (because conclusions are necessarily true).
- Immediateness and primariness, that is, indemonstrability.
- Necessity.[64]
- The first principles also have more intelligibility than and priority to conclusions resulting from them.
- They are causal of the conclusions.[65]

Science is, as such, a deductive chain starting from primitive *archai* (principles) of this general type.

In addition, we assent to Lee's affirmation that there are three kinds of *archai* (principles) from the Aristotelian scientific proposition as follows:

- Axioms are certain very general principles presupposed by the very possibility of knowing anything.
- Definitions simply assume the significance of certain terms.
- Hypotheses suppose both 'what' certain things are and 'that' those things are.[66]

The above is otherwise saying that we presuppose:

- *τά κοινά* or the axioms to have two likely characteristics according to Aristotle: such characteristics are 'commonness' to the sciences and 'priority' (one

62 *APr*, 25b 28–29.

63 *APr*, 25b 30. Aristotle defines a syllogism as "a discourse in which, certain things being stated, something other than what is stated, follows of necessity from their being so."- *APr*, 24b 18–20. Aristotle first limits himself to categorical syllogisms and later to modal syllogisms, which we affirm to be his main implication of demonstration in this discourse. Syllogism (deduction) is linked to our inquiry because the first principles are fundamental to the Aristotelian scientific demonstrative system. See *APr*, 41b 1–5, 41b 35–37, and 42a 30. On Aristotelian syllogism, see also I. Boh, "Syllogism," in *The Cambridge Dictionary of Philosophy*, R. Audi, Gen. ed. (Cambridge: Cambridge University Press, 1995), 780–782 and J. J. Sanguineti, *Logic and Gnoseology*, (Rome: Urbaniana University Press, 1988), 108–110.

64 *APst*, 74b 6; see *APst*, 71b 13.

65 See H. D. P. Lee, "Geometrical Method and Aristotle's Account of First Principles," in *Classical Quarterly* 29 (1935), 113–124.

66 See *APst*, 72a 14–20; 71a 12ff.

must know them to get to the knowledge of other things); in other words, the axioms are basic presuppositions of the process of reasoning.[67]

- Our hypothesis is the genus, which we assume to exist.
- The suppositions of the definitions, that is to say, the fundamental properties of the genus, are proved in demonstration to belong to the genus.[68]

Science is evident from these general principles. The first, 'axiom', is common and is utilised by most sciences. The second, 'definition', is peculiar to each science; it supposes the meaning of the essential attributes of a genus. The third is the 'hypothesis', which presupposes the existence of the genus for which the crucial features are proved in the demonstration.[69]

In line with the above, we specifically accentuate that Aristotle presents 'axioms' as, "those from which demonstration arises". Some Aristotelian scholars suggest that the axioms alone form the premises for a science. Others believe that a proof in any science arises by placing genus terms and their definitions in the axioms and substituting terms like 'triangle' for their definitions when such arise in proofs. However, besides pointing to the inadequacy of the axioms for this function, it may be objected that Aristotle also calls the principles of demonstration immediate statements (*protaseis*), in other words, axioms and posits. Another possibility is that Aristotle regards even stipulations and existence claims as premises, as well as other hypotheses, but treats the axioms as somehow more fundamental sources of proofs as reflected also in Lee's and some other writers' opinions.

### a. *On Axioms*

Aristotle requires the necessity of the axioms. In *Posterior Analytics* I, 6 one sees this requisite properly underlined in these words: "demonstrative knowledge … depends on necessary principles."[70] The proof subsequently follows:

> If anything is demonstrated, it cannot be otherwise. Hence the deduction[71] must depend on necessary premises. From truths [in other words, from premises which must be true but for which it remains an open possibility that they belong to the class of contingent assertions – *ta endechemena allôs echein* – …, that they belong to the class of assertions for which

67 See J. J. Sanguineti, *Scienza aristotelica e scienza moderna* (Roma: Armando Editore, 1992), 44–51.

68 See *APst*, 75a 39; 76b 3ff: We concur with some authors, like Lee, who proffer the following as citations of Aristotelian alternatives for axioms: *APst*, 76a 38; 76b 14; 77a 26, 30; *Met*, XI, 1061b 19; *APst*, 88b 28.

69 See H. D. P. Lee, "Geometrical Method and Aristotle's Account of First Principles," 113–124.

70 *APst*, 74b 5.

71 Authors like Scholz suggest that Aristotelian *syllogismos* (deduction) should be read as *apodeixis=apodedeigmenon* (demonstration). See H. Scholz, "The Ancient Axiomatic Theory," 63.



> only freedom from contradiction is required] one can infer without demonstrating; but from necessary propositions one cannot infer without demonstrating – for that is precisely the mark of demonstration.[72]

This is characteristic of the entire classical doctrine of axiomatics in the light of the Aristotelian concept of science. Consequently, the Aristotelian axioms belong to the class of necessary propositions.

We necessarily append that Aristotle's description of the propositions of a science conforms to the requirements of the Aristotelian metaphysical realism. This implies that scientific propositions must be 'true',[73] and must be known to be true.

Aristotle further requires that science be of necessary things and scientific knowledge grasp necessary states of affairs. Following this demand, Aristotle states that:

> We think we understand a thing *simpliciter* (and not in the sophistic fashion accidentally) whenever we think we are aware both that the explanation because of which the object is, is its explanation, and it is not possible for this to be otherwise. … Hence, that of which there is understanding *simpliciter* cannot be otherwise. Now whether there is also another type of understanding …; we do know through demonstration. By demonstration I mean a scientific deduction; and by scientific I mean one in virtue of which, by having it, we understand something.[74]

The following are major attributes by which the principles are identified in the scientific realm:

### b. *Intrinsic Quality of the First Principles*

This is a further proof of Aristotle's concern about explanations in reference to universals. For Aristotle, whatever holds universally of a subject should apply to it also intrinsically. Thus, Aristotle asserts:

> I call universal whatever belongs to something both of every case and in itself and as such. It is evident, therefore, that whatever is universal belongs from necessity to its objects. (To belong in itself and as such are the same thing e.g. point and straight belong to line in itself …, and two right angles belong to triangle as triangle …).[75]

72 *APst*, 74b 14ff.

73 We emphasise 'true' here because it is an important element for the Aristotelian first principles. It is a primary ingredient which Aristotle himself highlights among others as necessary for the proof using a first principle. We shall come to it shortly.

74 *APst*, 71b 9–19. *Simpliciter* here implies purely (simply, in an unmixed way). Scientific explanation uses principles through whose demonstration we acquire knowledge.

75 *APst*, 73b 26–32.

Following the above cited, Irwin suggests that an intrinsic property can be either essential or derived from the essence. Moreover, according to Aristotle, this type of universal component is not simply always true of the subject, because such a non-variable attribute is distinct from a simple universal.[76] Besides, only a 'proper' universal can have the attribute of necessity. We must discover the essential qualities and intrinsic concomitants of the subjects in order to find universals and necessary truths. Accordingly, Irwin supposes that Aristotle's requirement of necessity is a reflection of the Aristotelian demand for laws of explanation.[77]

c. *Natural Priority and Independence of the Principles*

Aristotle's affirmations on natural priority and actual first principles articulate the Aristotelian realist assumptions. We arrive at a real understanding of first principles as long as we grasp principles that already are, independently of our beliefs and hypotheses, prior by nature. Propositional principles, therefore, are prior and better known naturally as far as they refer to things that are prior and better known. These principles are not first principles because of our attributions to them but because of their natural independence.

Hence, Aristotle claims that an appropriate definition should be through things "prior and better known" and for the purposes of science must be through things that are prior by nature and better known.[78] There cannot be several real definitions of the same object because there is only an objective order of priority and knowledge.[79] In the same way, if the priority of a proposition to another is a natural one, it should necessarily correspond to some facts about the independent reality; and, if there is such equivalence to facts, there will not be other arrangements of the correspondent propositions to the facts.[80]

Now we come to truth, as an attribute of the elements. Aristotelian realism about first principles is a particular case of his general views on truth. A proposition's truth is in its uniformity to how things are independent of any of our beliefs in the proposition.[81] Therefore, first principles are truly first as long as they are equivalent to the things that are first in actuality. These first principles offer explanations as far as they conform to the independent things that authentically give explanation.[82]

76 See *APst*, 73a 32–74a 3.
77 See T. H. Irwin, *Aristotle's First Principles*, 119–120.
78 *Top*, 141a 26–27; 141b 3–34.
79 *Top*, 141a 31–141b 2; 141b 34–142a 9.
80 See T. H. Irwin, *Aristotle's First Principles*, 123.
81 *Met*, IX, 1051a 34–1051b 9; VI, 1027b 18–28.
82 See T. H. Irwin, *Aristotle's First Principles*, 124.



d. *Status of Principles of Science*

Aristotle demands that the first principles be self-evident, convincing, and independent. The first principles must not need any attestation to their authenticity. They should not admit of reasons (*aitiai*) for their justification. Hence, Aristotle says that:

> Things are true and primitive which are convincing on the strength not of anything else but of themselves; for in regard to the first principles of science it is improper to ask any further for the why and wherefore of them; each of the first principles should command belief in and by itself.[83]

And

> This sort of thing happens particularly in the case of the first principles; for while the other propositions are proved through these, these cannot be proved through anything else: we are obliged to get to know every item of that sort by a definition.[84]

A principle needs no proof because it is necessarily true of itself and necessarily seems true.[85] A first principle is 'evident' (*phaneron*) and is known only for itself and not because of another. To demonstrate the absurdity in the attempt to prove a first principle, Aristotle uses a deductive argument about colours given by someone born blind to illustrate.[86] Such a proof would imply a waste of time for the person with sight because the colours are obvious. Besides, the proof of the colours would not add to the sighted person's confidence in the conclusion.

Aristotle's comparison with things that are self-evident to the senses shows further how strong an assertion he, Aristotle, proposes for our understanding of the first principles. Any demonstration should naturally proceed from what is clear, prior, and credible (*pistotera*). Given that nothing is prior to the first principles, then, they should be known (*gnôrizein*) only through themselves. In fact, the best a scientist intending to make demonstrations should do is to rely on these principles and not attempt to demonstrate them. They are so to say indemonstrable principles. Aristotle then asserts:

> And for those one should indeed supply an argument from the principles and conclusions of geometry; but for the principles, the geometer as geometer should not supply an argument; and similarly for the other sciences too.[87]

83 *Top*, 100a 30–100b 20.
84 *Top*, 158b 1–4.
85 See *APst*, 76b 23–24.
86 *Phys*, 193a 4–9.
87 *APst*, 77b 3–6.

Attempting to prove the first principles is to beg the question.[88] Irwin lays emphasis on the fact that Aristotle in claiming the indemonstrability of the first principles shows that the principles need no demonstration at all in the demonstrative system. The fundamental nature of the first principles is not out of any convention, since conventional priority falls short of the Aristotelian notion. The non-conventional priority also in the explanatory relations falls short of epistemic priority. None of the above, then, can actually justify the primacy of the principles in a demonstration.

Consequently, Aristotle cannot allow that anyone else other than the geometer is to justify the geometer's first principles of demonstration. This is because by implication the supposed geometer's principles may not qualify as first principles after all. Conversely, a simple dialectical argument cannot demonstrate that the geometer's principles are primary and so renders the principles incapable of a position in the demonstrative system.

The Aristotelian requirements for epistemic priority outweigh all other non-inferential justifications. The first principles, therefore, are deprived of their ascendancy unless they are non-inferentially justifiable. Aristotle's pre-requisite for self-evident first principles implies that these principles satisfy the concept of truth as viewed by a metaphysical realist. Hence, the first principles must satisfy objective conditions for knowledge in an Aristotelian sense.[89]

### e. *Justification for the First Principles of Sciences*

Part of the problem of the first principles is with dialectics. Aristotle expresses reserve over the dialectic aid to the explanation of the first principles. Dialectics work with existing conventions and is open to challenges by anyone who rejects acknowledged starting points. However, any scientific knowledge goes beyond challenges of this nature based on objective facts. Since dialectic does not result in truth but only coherence, it is debatable that we should take its results as first principles of sciences. Aristotle by this assertion underlines a weakness in Plato's account of the foundations of the sciences. Aristotle's solution to this problem observed in Plato is through Aristotle's appeal to the intuition.

Plato's claim is that the 'synoptic' position of dialecticians allows them to substantiate the special principles of diverse sciences. The requirement of the synoptic perspective is that we appeal to coherence to facilitate our awareness of the relation between different principles. If dialectics make use of the synoptic methodology for the justification of the principles of the special sciences, Plato, then, has a source of confirmation.

88 See *APr*, 64b 28–38.
89 See T. H. Irwin, *Aristotle's First Principles*, 132–133.



Aristotle agrees with Plato to the extent that the special disciplines are deductive, and assume the truth of their respective first principles; dialectic is needful as a way towards the first principles. Aristotle, however, differs from Plato here because Plato believes further that dialectic arrives at the first principles and so the dialectician has the best access to real scientific knowledge (*epistêmê*).[90] "Aristotle, by contrast, denies that dialectical method actually reaches the first principles of the special disciplines; these special disciplines are genuine sciences, and dialectics is not science at all."[91]

Consequential to the Aristotelian style of treatment of these principles, some thinkers, like H. D. P. Lee,[92] justifiably believe that there is a predominance of geometrical ideas in Aristotle's description of the first principles in the *Posterior Analytics*. Lee sees it as a demonstration by Aristotle (in accordance with Aristotle's own conception), that the Aristotelian analysis is fundamentally an analysis of first principles of geometry.

### f. *The Scientific Principles' Autonomy*

Aristotle finds in the perceptual appearances the justification of the claim that is needed for the lack in dialectic in order to be adequately objective. A special science assumes objective truth because it offers explanation to a specific range of appearances. The diverse special sciences enjoy autonomy because varieties of experiences are proper for the treatment by different theories. Hence, Aristotle assumes autonomy for the special sciences, requesting 'proper' principles to the various conclusions.[93] Appropriate principles, therefore, are particular to different sciences and not derivable from a universal science.[94]

Aristotle asserts that the decisive principles of a special science are unconditionally decisive. Any science that claims universality, that is to say, 'in charge of everything' must discover ultimate principles, to which Aristotle does not guarantee success. Aristotle thus affirms:

90 *Rep*, 533d 4–4e 2.
91 T. H. Irwin, *Aristotle's First Principles*, 138. Irwin's opinion is that the Aristotelian and Platonic arguments are somewhat misleading. He believes that the essential difference is neither in the starting-point nor in the use of dialectics but in the evaluation of its conclusions.
92 See H. D. P. Lee, "Geometrical Method and Aristotle's Account of First Principles," 113–124.
93 *APst*, 76a 26–30.
94 See T. H. Irwin, *Aristotle's First Principles*, 138. One of the conditions for demonstration is derivation from appropriate principles. See *APst*, 71b 22–23. There is nothing like an unconditional demonstration, but only demonstration from principles proper to diverse sciences. These principles must be indemonstrable (*APst*, 76a 16–17, 31–32). The primary and appropriate principles (*APst*, 72a 5–6) are not the same as the propositions that are simply true and *endoxa* (*APst*, 74b 24–26). A homogenous conclusion with the fundamental principles is an outcome of an authentic demonstration so long as such conclusions are derived from appropriate principles.

> If this is evident, it is evident too that one cannot demonstrate the proper principles of anything; for those will be principles of everything, and understanding of them will be sovereign over everything. For you understand better if you know from the higher explanations; for you know from what is prior when you know from unexplainable explanations. … But demonstration does not apply to another genus.[95]

Ultimately, Aristotle in contrast to Plato insists on epistemic priority and rejects coherence as a source of justification. It is this demand that leads Aristotle to affirm that the first principles are self-evident.[96]

Having examined crucial elements on the general notion of Aristotle on the first scientific principles, we look subsequently at other Aristotelian major works on the foundational principles. Perhaps, the following Aristotelian proposal will act as a summary of the principles of science for they are indemonstrable as principles:

> Now if demonstrative understanding depends on necessary principles (for what one understands cannot be otherwise), and what belongs to the objects in themselves is necessary …, it is evident that demonstrative deduction will depend on things of this sort; for everything belongs either in this way or incidentally, and what is incidental is not necessary.[97]

### *A.3.3 Aristotle's Notion of the First Principles in Physics*

Aristotle's approach to the principles in the science of nature or physics reflects nature. He studies nature as an internal principle of change and stability. Aristotle defines change as the actuality of potentiality in *Physics*.[98] The primary type of potentiality is a principle (*archê*) of stability and change. Animate hearts, for instance, have the capability of pumping blood because the function that characterises hearts is explained through this pumping activity. This and other such cases designate potentiality[99] as cause or precisely final cause. This forms the main line of Aristotle's propositions on the first principles in *Physics*.

95 *APst*, 76a 16–23.

96 See *Top*, 163b 4–20; *Sophistical Refutations*, 175a 5–14. See also T. H. Irwin, *Aristotle's First Principles*, 140.

97 *APst*, 74b 5–10. See J. Barnes, *Aristotle's Posterior Analytics* (Oxford: Clarendon Press, 1975), 10.

98 See *Phys*, III, 1.

99 We underscore here that 'potentiality' differs substantially from 'possibility'. Potentiality is an innate capacity (power) to 'become' or develop into something in the future. Potentiality, therefore, is an activity of 'being'. Possibility instead, is a contingent situation; it is the state or fact of being likely or possible: a likelihood.



Some modern scholars like Wieland think that Aristotle commences the study of the principles in *Physics* I.[100] This is evident by Aristotle's side by side comparison of the way in which we discuss coming into 'being' by using few examples for demonstration. One example of this is that an uneducated person becomes educated; this is coming to 'be' (becoming). Besides, the comparative analysis of the linguistic structures results in a triad of principles, matter, shape (or form) and privation (which envelops all other examples of interpretation). In line with Wieland's proposition, we suppose that the entire doctrine of principles in the *Physics* is linked to speech data[101] because it deals mainly with the problem of coming into 'being' of things (in other words, something becomes another).

The inquiry into principles cannot put one in a position to derive all particular facts. One does not achieve a scientific knowledge of specifics especially in the way in which Aristotle treated them in the first book of *Physics*. Wieland supports this argument saying that it is connected with the fact that Aristotle attempts to demonstrate in the first part of the *De Anima*[102] that principles are not everywhere the same. In every circumstance, therefore, the path to the principles should be sought for anew.[103]

Further, in suggesting that the doctrines of his predecessors and the linguistic forms represent some of Aristotle's foundations in inquiring into the first principles, Wieland feels that Aristotle used the proposal of his (Aristotle's) precursors as a base for the Aristotelian hypothesis on the first principles in *Physics*. Wieland also claims that the task of the investigation into the first principles in *Physics* is to elevate to a definite level and summarise conceptually this implied knowledge about the said linguistic structures.[104]

The concept of principles in Aristotle has a functional explanation also. For Aristotle asserts that "it is common, then, to every origin to be the first point from which a thing either is or comes to be or is known."[105] Among others, Wieland infers that the real issue here is not the triad of being, coming to 'be', and coming to know, so much as the reality that in all these fields there is a supply of an analogous 'formal structure' by 'the first from which' (*to prôton hothen*).[106] Hence, Wieland cogently adds that the analysis of Aristotle's theory of principles through

100 See *Phys*, I, 7.

101 See W. Wieland, "Aristotle's Physics and the Problem of Inquiry into the Principles'," in *Articles on Aristotle*, 1, *Science*, 134.

102 *De Anima*, 402a 13 ff.

103 See W. Wieland, "Aristotle's Physics and the Problem of Inquiry into the Principles'," 134.

104 See W. Wieland, "Aristotle's Physics and the Problem of Inquiry into the Principles'," 133. Our basic pre-occupation in this discourse is not to inquire into the truth of Wieland's proposal. It remains a personal view. We are after some of the facts of the interpretation to the Aristotelian *Physics* in view of the first principles.

105 *Met*, V, 1013a 17.

106 See W. Wieland, "Aristotle's Physics and the Problem of Inquiry into the Principles'," 139.

linguistic structures does not entail that Aristotle's philosophy is principally a philosophy of language,[107] because Aristotle uses them largely for illustration.

With this cursory examination on Aristotle's inclination on the fundamental physical principles in mind, let us move to one of the principal aspects of our interest, the first principles in Aristotle's *Metaphysics*.

### *A.3.4 The Centrality of the First Principles in Metaphysics*

The Aristotelian *Metaphysics* is a compendium of several books in which Aristotle examines the most basic features of reality.[108] According to Aristotle, this universal science tries to understand the first principles of scientific knowledge and the ultimate conditions of every reality. The universal science studies, particularly, the fundamental state of existence and the essence of reality.

This Aristotelian universal science has four names; *First Philosophy*, the *Science of Being*, *Theology*[109] (these three came directly through Aristotle);[110] and the last, *Metaphysics*, which came through his compilers probably because they observed that the scope of the metaphysical inquiry characteristically goes beyond the physical.[111]

Though Aristotle believes in the experiential knowledge of facts, he posits the abstract study of 'being *qua* being' as a perfect way of discovering reality and its happenings. Aristotle delves into the search with an aim for a better result, because he fails to see such study in philosophers before him. With the Milesians, for instance, we see an over-emphasis on material causes, while Anaxagoras exaggerated the mind, and Plato, as we saw above, got trapped in the 'Forms'. Earlier on, also, there were Pythagoreans who only succeeded with mathematical abstractions.

Aristotle believes that metaphysics (more than any other science) is naturally structured to investigate first 'underlying principles' because not all principles are actually fundamental. Nonetheless, Aristotle does not study what we could refer

107 See W. Wieland, "Aristotle's Physics and the Problem of Inquiry into the Principles'," 139.

108 Perhaps, Aristotle neither arranges nor delivers lectures on the present arrangement of his metaphysical works. As a result, the current organisation has a sort of interruption of flow between Books IV and VI with Book V, which is a kind of 'philosophical dictionary', while Book XI is a sort of summary to parts of Book IV, and Books II and XI are probably not completely authored by Aristotle.

109 *First Philosophy* studies the first principles and utmost causes presumed by other sciences. *Science of Being* examines and sustains the presupposition that every other science studies some sort of being. *Theology* deals with the primary substance because it is the principal kind of being among all beings, hence, divine substance.

110 See *Met*, IV, 1–3; VI, 1.

111 *Metaphysics* is a name given to this group of Aristotelian works in antiquity (at an unknown date). Its usage suits the diverse Aristotelian application of the universal science to other sciences. Aristotle, therefore, depicts this universal science of 'being *qua* being' (*Metaphysics*) as the most comprehensive in his examination on the foundations and assumptions of other disciplines.



to as existential principles ('nature exists'), since in the *Metaphysics* he asserts that science presupposes the existence of its object of studies.[112]

Before proceeding with the treatise, we accentuate that there is a multiplicity of first principles also in metaphysics. However, their relevance is according to the order of priority. It is in the proper task of metaphysics as a science of 'being' to investigate the first principles in profundity more than any other science does. And so, it belongs to metaphysics to draw up a systematic catalogue of first principles. Since the particular sciences employ the principles only in parts, it behoves metaphysics to utilise these principles in all magnitude and to explore them as principles. Thus, Aristotle represents this notion when he says:

> Since it is evident that the first principles apply to all things, inasmuch as they are beings ('just being' is what they all have in common), it is proper to him who knows being as being to consider these principles as well. Precisely because of this, no one who cultivates the partial sciences attempts to say anything about the truth or falsehood of such principles … . Thus it is proper to the philosopher, who contemplates the nature of being, to study the first principles of demonstration as well. It is natural that the one who understands most about each genus be able to express the firmest principles about the subject matter in question. Therefore, it is also natural that the one whose subject is being *qua* being must be able to state the most certain principles of all things. And this is the philosopher.[113]

Hence, with this affirmation on the task of metaphysics as a science of 'being', Aristotle substantiates the study of the first principles as principles of 'being'. Springing from this Aristotelian view, Pérez de Laborda also asserts that metaphysics seeks, in one aspect, the first principles of being, not intended as existent reality but as intrinsic dimensions in the nature of the things of whose principles they are, and which allows one the understanding of their metaphysical structure. Such principles, therefore, are not the existing reality, but principles of existent reality.[114]

The first and most evident of the first principles is the *principle of non-contradiction*. There are varied formulations of the PNC; nevertheless, the metaphysical formulation that captures our interest in this study holds that "the same attribute cannot at the same time belong and not belong to the same subject in the same respect."[115] This Aristotle's original enunciation, which literally means that, whatever is, 'cannot simultaneously and in the same sense not be' is the most appropriate for the science of 'being'.[116] Aristotle sees this principle (the

112 *Met*, VI, 1025b 10–20; see also *APst*, 76a 31ff.

113 *Met*, IV, 1005a 28–1005b 11.

114 See L. Clavell, M. Pérez de Laborda, *Metafisica* (Rome: Edusc, 2006), 52.

115 *Met*, IV, 1005b 19–20.

116 See *Met*, IV, 1005b 20–30; see also *APst*, 77a 10–22.

PNC) as the 'most certain' and 'most popular', where it is impossible for anybody to be in error.[117] Elucidating this Aristotelian PNC, Alvira et al suggest that, as a first judgment, the PNC is so called because it manifests the fundamental condition of entities, which implies that no 'being' contradicts its 'being'; thus, this principle is founded on being, and always expresses its very consistency and opposition to non-being.[118]

From the foregoing, it is obvious that the PNC is founded on the notion of being itself and expresses our comprehension of being (in reality), except that in it there is an absence of non-being.[119] Likewise, there are other first principles of metaphysical order in Aristotelian conception, some of which refer to the notion of being and non-being, like the *principle of excluded middle* (there is no middle way between being and non-being) and *the principle of identity* (being is being).

With the above highlight in mind, we assert that the major defence of the first principles is seen in metaphysics, where it is demonstrated that the denial of such principles results in a negation of the knowledge of being and, consequently, of existence in its entirety. This, in turn, indirectly implies a rejection of all authentic human understanding. The consequential effect of such extirpation of the truth of the principles is the invalidation of other areas of science and human endeavours as well. Thus, Aristotle makes a pragmatic exposition on the first principles of being especially in the *Metaphysics* Book IV. The Aristotelian claim therein validates first principles to the present day despite all modern philosophies. The major characteristic of these principles especially as found in the *Metaphysics* is evidence. Let us briefly examine this attribute relating it to metaphysics and the first principles.

*Evidence*: in every science, the presuppositions of the first principles are foundations for proper conclusions. Nevertheless, metaphysics searches for its principles single-handedly as it is not subordinate to any science. It endeavours to study the first principles presupposed by other sciences.[120] To metaphysics, therefore, more than any other branch of studies properly belongs the study of the first principles since metaphysics is first philosophy. Hence, unlike some other realities, the first principles studied by metaphysics are maximally evident and their truth is gathered immediately in a natural and spontaneous way.

Moreover, these first principles consist of notions like other propositions. They are principles regarding notions, such as, being and non-being, unity, identity, etc. and they express the general rules concerning these universal notions. The evidence of the first principles is dependent on the evidence of the notions. Hence, it is necessary that each of the fundamental principles becomes evident 'for all'. We re-emphasise the self-evidence of the first metaphysical principles,

117 *Met*, IV, 1005b 11–14.
118 See T. Alvira, L. Clavell, T. Melendo, *Metafisica* (Firenze: Le Monnier, 1987), 29.
119 See L. Clavell, M. Pérez de Laborda, *Metafisica*, 55.
120 See L. Clavell, M. Pérez de Laborda, *Metafisica*, 53.



notwithstanding they are also complicated and sometimes very problematic. Only a few evident principles 'in themselves' are equally evident 'for us'. The culminating evident principle 'in itself', however, is God's existence, but he, God, defies in his essence the comprehension of human intelligence, hence, is not evident 'to us'.[121]

### A.3.5 *The Aristotelian First Principles in Protological and Theological Discourse and Relation of First Principles to Final Ends*

Aristotle manifests that metaphysics is a *logos* of that which is first, i.e. 'protology' more than ontology. With the term wisdom (*sapientia*, in Latin), all intend the research of first causes and first principles.[122] This accentuates the teleological nuance of the first principles that we shall come to shortly. Among others, a first metaphysical principle expresses that which is radical of being, not an *a priori* rule of reason: the intelligence assumes this principle and holds onto it because the intelligence recognises it.[123] The first principles refer to the 'conclusive' dimension of reality; therefore, these principles support all knowledge.[124]

By inference, then, if the interest of philosophers on the first principles is because they lead to higher principles of reality, it is equally their interest to discover how and why Aristotle proposes the teleology of such principles. This same import brings them to explore these first principles to the point of their resolution.

In view of the foregoing, we could suggest that the most interesting element concerning our quest in this analysis is that the first principles lead invariably to the discovery of the ultimate 'First Principle' of all. This fact also from hindsight is a demonstration of the specific nature of first philosophy, whose basic search is protological as well as teleological.

We see a demonstration of the importance of the first principles in relation with final ends in this regard. According to MacIntyre, the elucidation of the scheme of *causa* and *principium* are adequate in a thought process where the mind moves towards a proper end, *telos*, which is an attained condition where the mind is knowledgeable of its own advancement towards that end, that is to say, an understanding of the perception of the first principles especially the ultimate principle.[125] We could suggest further that first principles can only have a place in a universe characterised in terms of certain determinate, fixed, and unalterable ends. These ends provide:

121 See L. Clavell, M. Pérez de Laborda, *Metafisica*, 54–55.
122 *Met*, VI, 1025b 3–10.
123 See L. Romera, *L'uomo e il mistero di Dio: Corso di teologia filosofica* (Roma: Edusc, 2008), 147.
124 See L. Romera, *L'uomo e il mistero di Dio*, 148.
125 See A. MacIntyre, *First Principles, Final Ends and Contemporary Philosophical Issues* (Milwaukee: Marquette University Press, 1990), 5.

> the standard by reference to which our individual purposes, desires, interests and decisions can be evaluated as well or badly directed. For in practical life it is the *telos* which provides the *archê*, the first principle of practical reasoning: 'Deductive arguments concerning what is to be done have an *archê*. Since such and such is the *telos* and the best...'[126]

In the above lies a confirmation of MacIntyre's notion of the unity of a relation between the quest for the first principles, which are protological, and the final ends that underline the teleological dimension. We find also a pointer to God, the real *archê*, the 'Unalterable-Principle.'

### *A.3.6 The Possibility of the Knowledge and Elusiveness of the First Principles in Aristotle*

The knowableness of the first principles is addressed principally through the metaphysical branch, epistemology. Consequently, knowledge of first principles also enjoys a metaphysical priority because first principles are fundamentally of first philosophy. This is perceptible through the indemonstrability of these principles. There is need for one to have a primitive existential knowledge in order to properly discuss the universal principles. To discover these first principles, therefore, it is beneficial to start with the existential principles; namely, the 'world', the 'self', and 'others'. True knowledge occurs only by the individual's immersion in the 'natural world'. This is because in trying to comprehend the world we understand alongside (even if in a confused way), 'being', 'something', and 'things'.[127] The 'world,' in effect, constitutes a kind of habitual background of the individual's knowledge. Above all, the first existential principles are epistemologically necessary, since no knowledgeable person can ignore them while researching into (the knowledge of) other things.

Thus, from the aforementioned, it is deducible that the knowledge of truth cannot be founded in other principles except the first principles; otherwise, there would be an infinite regress. That the first principles are not demonstrable does not entail an imperfection. On the contrary, the certitude of these principles is more complete, since every demonstration is necessarily founded on something that is indemonstrable, which simultaneously is the certifier for the demonstrate (i.e. the thing) starting from it. These principles, in consequence, are identifiable as "the indemonstrable principles of demonstration." We could justifiably say that the defying of demonstration shown by the first principles does not deprive us of the comprehension of the truth-value in them. In view of the foregoing, we can also apply here the affirmation that truth is not only grasped by demonstration but also by 'evidence'.

126 *EN*, VI, 1144a 32–35.
127 This implies that we understand existential 'being' and the essence of every 'being'. See J. J. Sanguineti, *Introduzione alla gnoseologia* (Firenze: Le Monnier, 2003), 174–193.



One can grasp the first fundamental ontological principles by the intellect with a minimum adequate experience, (that we shall examine in due course). Thus, these principles are neither 'innate' nor *a priori*.[128] They are induced by an illuminated experience through inductive abstraction. Moreover, one can know the principles habitually, and that is as habit of the intelligence or a sort of implicit prescience. Hence, Sanguineti justifiably thinks that Aristotle defends the PNC,[129] and dedicates a good portion of the *Metaphysics* IV, Chapters 4–8, to the polemics against relativism. It is essential to note the pivotal role of the PNC as a first principle.[130] Irwin's idea on the problem of principles finds an echo here. According to Irwin, the first notions and ontological principles are natural, implicit, pre-objective and pre-linguistic experience and possession. These first principles, therefore, constitute the key element capable of refuting errors of relativism, since they are universal and incontrovertible. The first principles are indemonstrable, but these first principles also are indirectly disputable and above all *per absurdum*.

In the final analysis, these principles are like a platform because, in realistic philosophy, the investigation into 'noetic' principles proceeds to the study of ultimate real principles (cause, essence, and person). The exploration also progresses finally to the science of God who is the 'Ultimate Principle' in our regard (*quoad nos*) and the 'First Principle' of the universe (*quoad se*). Science (knowledge) seeks principles that are universal and not particular ones.[131] Hence, Aristotle establishes laws that guide scientific principles and these laws, in turn, are like restrictions for 'scientific knowledge'.

### *A.3.7 The Principle of Non-Contradiction as Case Study*

In view of the foregoing, we note that Aristotle, from the point of view of knowledge, maintains that the first principles are defendable not through direct demonstration but only through *reductio ad absurdum*. The PNC is perceptible through an (Aristotelian) inductive method. To the decliners of the principle of non-contradiction, then, Aristotle sustains that:

> some, through ignorance, demand that it be demonstrated as well; it is ignorance, in effect, not to know which things must be demonstrated and which things not. It is impossible to demonstrate absolutely everything

128 *A priori* here implies propositional knowledge that does not depend on the evidence of experience for its authority. See E. J. Lowe, "A priori and a posteriori," in *The Oxford Companion to Philosophy*, T. Honderich, ed. (Oxford: Oxford University Press, 2005), 45.
129 *Met*, IV, 1005b 30.
130 Sanguineti believes that through the PNC as through a spectrum, one views other first principles because of this principle's absolute force of evidence and primitive character.
131 *Met*, III, 1003a 14–15; XI, 1059b 24–27, See also *APst*, 85b 23–25. We infer that these principles are primitive for being universals, which is why these principles can be regarded as scientific principles.

(since one would have to proceed to infinity, and there would be no demonstration in this case, either); and if a demonstration of some things should not be sought, can they, perhaps, tell us which principle is less in need of demonstration than this one? However, the impossibility that a thing both be and not be at the same time can also be demonstrated by refutation, as long as one's opponent is willing to say something. And if he does not say anything, it is ridiculous to try to discuss anything with him inasmuch as he will not say anything; such a person, by the very fact of not being willing to say anything, is behaving like a plant.[132]

The implication, as we somehow saw above, is that for one to say something involves the recognition that an affirmation of a thing is contrary to its negation. In effect, one is asserting that being and non-being is simultaneously contradictory. However, just as the notion of 'being' sometimes eludes our complete apprehension, the same way do the first fundamental principles, because they mirror reality in its basic sense.

The denial of the first principles as demonstrated in the PNC, therefore, is by inference self-contradictory. An attempt at demonstration of the first principles is to beg the question (*petitio principii*), since the intended demonstration is already the foundation of that which is in affirmation. The possible solution to the problem is 'infinite regress' and, in that instance, there is no demonstration. The reason is that the certification of any reasonable culmination is by reduction to a first principle of the demonstration which, in turn, is unobtainable by an incessant chain of successions. The first indemonstrable principle (PNC), then, is the only basis of the facilitation of a demonstration.

Consequently, Llano confirms the most certain of the first principles to be the *principle of non-contradiction*. This is verifiable through Aristotle's own hypothesis. The PNC is necessary and cannot be mistaken and, as such, is the best known of all (even at that there is a problem of total comprehension). Hence, Aristotle himself opines:

that principle which necessarily must be known by anyone who wishes to understand all beings is not a hypothesis, but must be known necessarily by the one who wishes to know anything, and it must be known prior to any other knowledge. Thus, such a principle is evidently the firmest of all principles. What this principle is, can be stated as follows: It is impossible that the same thing both be and not be at the same time and in the same respect … . This is the firmest of all principles … . It is impossible in effect, that anyone believe that the same thing both be and not be, – as in the opinion of some – Heraclitus said. … And if it is not possible that

132 *Met*, IV, 1006a 5–15.



contraries be present simultaneously in the same thing …, and if a contradictory opinion is a contrary of a given opinion, it is obviously impossible that a given person simultaneously admit that the same thing both be and not be. … Therefore, all demonstrations work back to this judgement since it is, by nature, the principle of all other principles.[133]

From the foregoing, we can confirm the affirmation on the indispensable attribute of the PNC in all judgments and, consequently, any quest for knowledge because the PNC excludes all error. In view of the proceedings and with Llano, we further propound that not everything is demonstrable; a contrary conviction is a proof of ignorance. The search for the verification of evident principles is lack of knowledge, stupidity, and sheer senselessness because it yields no fruit.

### *A.3.8 The Unresolved Problem of the First Principles in Aristotelian Works*

As a result of the aforementioned observation on the non-systematic style of Aristotle's works, we establish that it will be an uphill task to try to stitch together the Aristotelian argument on the first principles because of the complexity involved in the attempt. The best we can say is that Aristotle, the author of the initial surviving texts on metaphysics and logic, created a principle that we may refer to as the Aristotelian tautology, A = A, which eventually achieved the historical distinction of the assumption of a proper name *the first principle* and this has meant a perplexity for researchers over 2000 years.

The nucleus of the discourse here is that there is not only one first principle, and that Aristotle himself did not endeavour to curtail the first principles to one. There are varied *a priori* things known to us. Aristotle gives his interpretation of the stated principle in Greek in *Meta ta physica*.[134]

However, this principle remains the original expression of coherence in the western idea. One can suggest that any definition and reasoning in different languages or fields assume this principle in an *a priori* manner. The principle is self-evident (*per se notum*) and beyond suspicion as all doubts stem from contradiction. Nonetheless, its evident nature defies the common man's/sceptic's knowledge. Here, then, is the crux of the discourse.

Unravelling the puzzle, one of the authors on Aristotle's physics, Wieland, thinks that Aristotle does not want to give the impression of a *direct intuitive knowledge of principles*. The knowledge that we eventually acquire of the first principles is not a derivative knowledge 'from' those things whose principles they are. Actually, no principle of principles exists and it is unthinkable to assert such, but it is a complex concept to consider. Several paths can lead to the

133 *Met*, IV, 1005b 11–34.
134 *Met*, IV, 1005b 20: "It is, that the same attribute cannot at the same time belong and not belong to the same subject in the same respect."

first principles (which explain their impenetrability). Nevertheless, Wieland in his discourse also demonstrates simultaneously the impossibility of the derivation of such principles 'from' other higher principles. The evidence of the first principles is often deducible from the fact that once discovered, nothing, as such, could contradict them as first principles. Nonetheless, no matter the path to the first principles, it is always a complicated one. According to Wieland, the Aristotelian positive implication here, therefore, is that we arrive at the knowledge of first principles through themselves because, as principles, they must refer to the reality whose principles they are.[135] This supposition comes from what we can regard as a clear formulation of the link between the knowledge of a thing and the knowledge of its cause in *Posterior Analytics*.

In addition, according to Wieland, Aristotle affirms the intricate character of the first principles as reflective notions by the Aristotelian usage of many systems of principles. Another confirmation is that no first principle occurs in isolation (the principles are always in pairs) in Aristotle's conception. In view of the above stated, Wieland elucidates that the first principles are not arguments in themselves but valuable strategies for ascertaining the apposite line of reasoning in a real circumstance.[136]

In the final analysis, we can posit that the unity of the first principles is an analogical unity. Wieland also supports this view by citing the fourth and fifth chapters of the twelfth book of the *Metaphysics*, on the detailed Aristotelian argument.[137]

We now discuss properly the problem of the first principles having the above highlight on their intricate character and unity in view. The discourse on the first principles occurs principally in one of Aristotle's writings, the *Metaphysics*, because the first principles in their fundamental sense are equated to Being. We must, however, note that given the nature of Aristotle's works, his treatment of the first principles is not restricted only to the *Metaphysics*. Hence, in Aristotle's general explication in the philosophical works, Aristotle affirms that he searches for first principles or *archai* ('origins'):

> When the objects of an inquiry, in any department, have principles, causes, or elements, it is through acquaintance with these that knowledge and understanding is attained. For we do not think that we know a thing until we are acquainted with its primary causes or first principles, and

135 See W. Wieland, "Aristotle's Physics and the Problem of Inquiry into the Principles'," 136.

136 See W. Wieland, "Aristotle's Physics and the Problem of Inquiry into the Principles'," 136. We quote the above-depicted idea of Wieland as follows: "The fact that Aristotle employs several systems of principles alongside each other is confirmation of their character as concepts of reflection. So, too, is the fact that no principle occurs in isolation in Aristotle: principles always crop up in batches (usually in pairs) and always in reciprocal relations... They are not in themselves arguments, but only useful devices for finding the appropriate argument in a concrete situation."

137 See W. Wieland, "Aristotle's Physics and the Problem of Inquiry into the Principles'," 136.



> have carried our analysis as far as its elements. Plainly, therefore, in the science of nature too our first task will be to try to determine what relates to its principles. ..., for the same things are not knowable relatively to us and knowable without qualification. ...[138]

Irwin aptly suggests that the association between knowledge and first principles is expressed in Aristotle's description of a first principle as "the first basis from which a thing is known."[139] Part of the problem of the first principles is that the quest for first principles is not restricted to philosophy, because it is among others the interest of biology, meteorology, history, and in fact, all the sciences. However, the glaring difference between the philosophical study and other areas is that in philosophy this inquiry assumes a primary role because of its proximity to reality itself.[140] Hence, Aristotle affirms: "clearly then Wisdom[141] is knowledge about certain principles and causes."[142] No wonder most philosophers who cannot come to grips with the notion underrated them and others trashed them. In the final analysis, the truth about the principles remains.

In general, these first principles include propositions and beliefs. Thus, in line with our previous comment on the complex nature of the first Aristotelian principles, we think that Irwin is right in proposing that existing things are first principles, because they allow us access to other things which exist. Our scientific knowledge also (*epistêmê*) is an attempt to explain fundamental things or Being, which are first principles. The thing known 'naturally' is both the proposition and the very thing it tries to recommend.[143] The two together are first principles and we affirm both simultaneously and in the same manner.[144] In the Aristotelian conception of the first principles, every principle combines simplicity with independence, hence, another problem for doubters to grapple with. That is perhaps why Aristotle suggests we should begin with things more familiar to us in our search for the first principles,[145] that is, with values common to us. Aristotle presents a puzzle here, since the first principles are known unconditionally and by nature, even if these principles appear to be less clear and less well known. The first principles, therefore, are endowed with qualities of being known naturally. That

138 *Phys*, 184a 10–21. See also *EN*, 1098b 3–8; *Top*, 105a 16; 141b 4; *APr*, 68b 35; *Phys*, 188b 32; 189a 5; *EE*, 1220a 15; *Met*, VII, 1029b 11.

139 *Met*, V, 1013a 14–15.

140 See T. H. Irwin, *Aristotle's First Principles*, 3. See also *De Anima*, 403a 3–10; *Met*, VII, 1029b 3–13; *EN*, 1095a 30–1095b 4; *EE*, 1216b 26–39.

141 Wisdom here is equivalent to philosophy whose literal meaning is the quest for (love of) wisdom.

142 *Met*, I, 982a 1–3.

143 The hypothesis that a 'thing naturally known' is both the proposition and what it propounds, explicates, and exposes us to an aspect of the complexity of the first principles.

144 See T. H. Irwin, *Aristotle's First Principles*, 3.

145 *EN*, 1095a 2–4.

the first principles, then, are things known by nature is loaded with meaning. This does not suggest banal knowledge, since what is naturally healthy is something healthy for those in a good physical state,[146] for Aristotle says:

> Perhaps, also, what is absolutely intelligible is what is intelligible, not to all, but to those who are in a sound state of understanding, just as what is absolutely healthy is what is healthy to those in a sound state of body.[147]

We can deduce from the above reference that the first principles are independent objective realities, especially as seen in the principle of identity, which states that a thing in reality is what constitutes it. When we grasp these first principles, they become known to us. Since the principles are 'prior by nature', we notice also that these same principles are 'prior to us' when we have an understanding of them. We, therefore, concur with Irwin's assertion that it is at the point of the discovery of the principles that we realise that they are more fundamental (*archai*) compared to things we initially knew.[148]

However, contrasted with the above stated, Wieland's conviction is a reverse of the proffered order and Wieland further affirms that Aristotle reinstates a search for things with a quest for the correct illuminating notions and propositional principles.[149] According to Wieland, in addressing the issue of first principles, Aristotle makes an indifferent articulation of things and their propositions. We possess the right beliefs if our account of the first principles is correct. By so doing we have a grip of 'objective' (propositional) first principles illustrating non-propositional first principles of objectivity in reality.[150] From Wieland's point of view, instead of 'to us' in a 'natural way' he seems to point to the fact that by 'serving' as a principle, something becomes known naturally.[151] We notice that the part of natural priority is misplaced in his conception.[152]

First principles as such defy only one definition because of several aspects of the one notion. According to Wieland in the work already cited, in an investigation, the first principles arise at the end, not in the beginning. This hypothesis, nevertheless, leaves us with a problem of how to justify the fundamental character

146 See *EE*, 1235b 30–1236a 6; 1237a 16–18.
147 *Top*, 142a 9–11.
148 See T. H. Irwin, *Aristotle's First Principles*, 4.
149 See W. Wieland, "Aristotle's Physics and the Problem of Inquiry into the Principles'," 136.
150 See W. Wieland, "Aristotle's Physics and the Problem of Inquiry into the Principles'," 136.
151 Wieland claims that 'to us' and 'by nature' is „was wir immer schon vorausgesetzt haben, wenn wir etwas *aus* etwas anderem begründen." W. Wieland, *Die aristotelische Physik* (Göttingen: Vandenhoeck & Ruprecht, 1970), 73.
152 Wieland also adds: „doch Aristoteles kennt keine besondere Bewußtseinssphäre, der dann auf rätselhafte Weise eine von ihr unabhängige subjektfreieDingwelt gegenüberstehen würde." W. Wieland, *Die aristotelische Physik*, 73.



of the first principles if they are situated at the end.[153] We can also fairly consent to the proposal since it is connected to the fact that Aristotle recognises a plurality of first principles, which are positioned unconnected side by side and cannot be reduced in their turn to a common higher principle.

It is expedient before we conclude on Aristotle to add that one cannot conveniently discuss Aquinas' notion of the first principles without first tracing it back to Aristotle's because Aquinas developed his thesis on the first principles from the Aristotelian conception. Aristotle as we mentioned earlier in our inquiry is the man and pillar of the first principles in ancient Greek philosophy on which Aquinas based most of his novel system in philosophy especially the first principles. Of all the ancient Greek philosophers, Aristotle is the only one Aquinas refers to as 'Philosopher' to confirm how much he appreciated, internalised and utilised Aristotle's fundamental notions. Consequently, we delved into a generous discourse of Aristotle's concept of the first principles to give our investigation a footing, because a tree without deep roots lacks adequate sustenance and withers in due course.

With the underlined complex condition of Aristotle's treatment and diverse interpretations given to the Aristotelian notion of the first principles in view, we examine other notions of the first principles in chosen subsequent philosophies.

## B. Augustine

### *B.1 The Knowledge of the First Principles in Saint Augustine*

Aurelius Augustinus (354–430 AD) was a North African Bishop born in Tagaste. Augustine was a Christian Neo-Platonist convert, Doctor and Father of the Roman Catholic Church, an eminent philosopher and theologian. One of the decisive developments in Augustine's philosophical enterprise is that of being a major source through which classical philosophy in general and Neo-Platonism in particular enter into the mainstream of early and subsequent medieval philosophy. Augustine makes other significant contributions that emerge from his modification of the Greco-Roman inheritance, e.g. his account of knowledge and illumination (that we shall examine shortly).

Like Plato, Augustine has no specific hypotheses on the first principles because of his inclination to Neo-Platonic philosophy, the field of his exercise of the mind before conversion. Neo-Platonism, as it were, also prepares Augustine for the said conversion. This could explain why Augustine remains a Platonist and uses Platonic concepts to resolve major problems. Nonetheless, this adherence does not

153 See W. Wieland, "Aristotle's Physics and the Problem of Inquiry into the Principles'," 135.

signify simple acceptance; rather, it involves interpretation and a transformation of the very principles of Platonism within the limits of the needs of Christian thought.[154] Platonism emphasises the participation of the soul in a supra-sensible world (Ideas, *Nous*). The intellect acquires the concept of the intelligible and, consequently, becomes a participant of wisdom through the mentioned participation.

In line with the foregoing and as a Platonist, Augustine accepts participation, but attributes to God the granting or imparting of these intelligible notions to the soul. Hence, in the Truth of God, the Word of God, exist the eternal truths, the species, which are the proper principles of things that are the models of created beings. We know both the eternal truths and the ideas of existent beings through the intellectual light imparted to us by the Word of God. In this proposition is the nucleus of Augustine's theory of 'illumination' that he employs for the solution of key philosophical problems.

### B.2 *The Possibility of the Principles in Augustine's Epistemology*

To arrive at firm knowledge, Augustine affirms that truth exists; with his formation in philosophy through Scepticism,[155] Augustine learns to start with sceptic doubt in order to arrive at certainty, because according to him one cannot doubt without the truth in which the scepticism is subsumed. This sceptical intuition helps Augustine to come out of the radical doubt in which he fell before his conversion. For Augustine, the intuition with which doubt is made conscious to the mind is already the truth on the way. This is the inception of Augustine's *si fallor, sum* that preceded Descartes famous *cogito ergo sum*.[156]

With his contact with the Scepticism of the Academy, Augustine knows and has a conviction that the problem of knowledge involved dual difficulties, one regarding the existence of the knower,[157] and the other regarding the foundation of knowledge itself. Augustine overcomes the first Scepticism of the academicians by his dictum '*Si fallor, sum* ...' that is 'if I doubt, I exist ...' Thus Augustine asserts the existence of the one who knows. Confronting the next question about the cause

154 Augustine precedes and is likened to Thomas Aquinas in the work of adapting ancient thought to Christianity, for just as Aquinas undertook to lay down the thought of Aristotle as the rational basis of religion, so Augustine did the same with the teaching of Plato and Platonism.

155 Augustine had contact with the Scepticism of the Academicians during his years of philosophical formation. This contributed to Augustine's modelling of his philosophical notions especially regarding knowledge, the existence of God and truth, interiority, and man's goal.

156 Augustine's Scepticism is differentiated from Descartes' because in the former there is a presupposition of faith in search of profundity, while the latter has a touch of real doubt. See A. Ghisalberti, "Agostino," in *L'universale: la grande Enciclopedia Tematica; filosofia* Vol. I, A. di Luciano et al., eds. (Milano: Garzanti Libri, 2003), 10–12.

157 The Sceptical academicians deny the fact that the knowing subject exists.



of knowledge, as a Platonist, Augustine underestimates sensitive apprehension and so he does not consider sensitive cognition as the basis of intellective knowledge.[158]

According to Augustine, intellective knowledge comes through illumination. In Augustine's notion, the intellect needs the light of God to apprehend intelligible beings just as the physical eye needs the natural light to see sensible things. Thus, the Wisdom or the Word of God conveys eternal ideas, truths, genera, and proper or formal principles to our minds. Augustine's assumption on this, therefore, is that intellectual knowledge defies the natural operational acquisition of the mind but is a participation in God.[159] It follows that the intellect cannot independently attain any knowledge of intelligible beings, but is enabled to do so through illumination.

### B.3 *Augustine's Theology of God*

The existence of God in Augustine is demonstrable both with *a priori* and *a posteriori* arguments. Nevertheless, with his theory of illumination, the most probable convincing premises for Augustine will be the *a priori* evidence from innate illumination in our intellects. Following Augustine, the presence of the illumination on its own is a proof of the existence of God. Hence we recap Augustine's metaphysical (*a priori*) proposition as follows. We are aware of possessing within us ideas and formal principles that are eternal, naturally universal and necessary, and unlimited in space and time. These universal principles[160] presuppose God, a necessary being, infinite in time and space, who imparts such universal principles to us through the Wisdom and Word of God.

Augustine further distinguishes his Platonism by his entirely different submission on the knowledge of the nature of God and the Trinity.[161] For

158 Augustine fundamentally differs from Aristotle and Aquinas from this point of view; the latter affirm sensitive cognition as basic to intellectual knowledge. This discrepancy enhances Augustine's Platonism and contributes to the peculiarity of his philosophy.

159 Augustine's theory of innatism concerning ideas is rooted in participation. We cannot know anything, even the principles, except granted and inspired. Consequently, the first principles may not be interpreted as somewhat intellectual assets in Augustine's context but entirely as natural gifts of insight of God's illumination. See A. Pincherle, "Agostino," in *Enciclopedia Italiana*, G. Treccani et al., eds. (Roma: Istituto della Enciclopedia Italiana fondata da Giovanni Treccani, 1949), 913–928.

160 According to Augustine, the universal and necessary principles cannot originate from the external world or from us, because as contingent beings, we lack these characteristics of universality and necessity due only to God, the absolute being. We can suggest that on such hinges Augustine's hypothesis likened to the first metaphysical principles since he has no explicit theory of first [universal] principles.

161 We can justifiably argue here that Augustine demonstrates the illumination he proposes by distancing himself from Platonic errors through a solid perception on the nature and the 'be-ingness' of God.

Augustine, God is eternal, all-powerful, immutable, all-knowing, absolute, a pure spirit, composed of nothing and without potentiality, and a personal and intelligent being. From the mystery of the Trinity (which he so much inquired into) Augustine affirms God as 'being', 'knowledge', and 'love'; and given that God created the world, the universe is a manifestation of the three attributes of God.

Hence, we conclude our brief discourse on Augustine's notion of God and universal principles. We shall subsequently take a cursory glance at a few modern tendencies in view of the first principles before our main inquiry.

## C. Modern Approach to the First Principles

The modern *Problem of First Principles* comes about by the fact that we grapple with how to know first principles to be 'true' and how we can 'verify' or 'justify' them, if they defy proof. The modern maxim is that they must be 'non-inferentially' justified. How this can work out, we will see in due course.

### *C.1 Nominalism and Empiricism*

The terminology 'nominalism' has much to do with the philosophical nuance of its proponents. As implied in the word, things that are referred to as general ideas are only names, mere verbal designations, that serve as labels for a series of particular events or a collection of realities. There are two varieties of nominalism. One addresses the refutation of abstract objects and another is the denial of the existence of universals.[162]

Generally, philosophers, especially metaphysicians, postulate universals or abstracts. Nominalists, therefore, refute the existence of abstract and universal concepts, and deny the fact that the intellect can generate them. Nominalism from its inception was a tussle between the exaggerated realism of Platonists and some contrary positions. Hence, nominalism has played a major role in metaphysical contention since medieval times, when accounts of the second category gained ground. Though in nomenclature they agree, the two variations of nominalism are mutually independent and can be conveniently sustained without the other. Nonetheless, the two share crucial common motivations. Nominalists hold that an appeal to resemblances is to beg the question. For them, resemblance is similarity in some general respect between general concepts.

162 See E. J. Lowe, "Nominalism," in *The Oxford Companion to Philosophy*, 660.



Ockham, a chief proponent of nominalism, was a radical logician with an exceptionally critical mind in his time. The principle of simplicity forms a central thesis of Ockham's system, to the extent that this principle became recognised as 'Ockham's Razor'. According to Ockham, the razor is required for the elimination of unnecessary hypotheses. Ockham promotes nominalism in metaphysics with the view that universal essences, such as, humanity and redness, are nothing but mental concepts. Furthering the development of an Aristotelian ontology, Ockham only accepts individual substances and qualities. Epistemologically, Ockham advocates immediate realist empiricism, whereon, without the aid of innate ideas, human beings are able to perceive objects through 'intuitive cognition'. These perceptions produce all our abstract conceptions and furnish knowledge of the world.[163] Ockham's theory contradicts the reality of the first principles and reduces knowledge only to perceptive operation.

Consequently, the 'nominalist solution' is an unmitigated refusal of the "ontological value of the universals"; this affects the core of our discourse on the first principles, which are archetypes and real foundations of knowledge. Although it principally remains a name (full nominalism) or a concept of reason (conceptualism), because it is attributed to many, the common notion of the earlier nominalists is the *universale in praedicando*.[164]

The recent turn in nominalism is its repudiation of abstract entities, universals as well as particulars through rejection of propositions, sets, numbers, possible worlds or individuals, relations and probably also God.[165] Nominalism is linked to and leads to real empiricism.

With the above consideration on the basics of nominalism, we come to empiricism, a philosophical theory that posits the derivation of all knowledge from experience. According to this belief, all ideas are founded on experience; therefore, knowledge of the physical reality can only be a generalisation from particular instances and lacks the prospects to arrive at anything with certainty.[166] The metaphysical realistic philosophy of Aristotle on which lies the doctrine of the first principles contrasts with this empiricist conjecture. Furthermore, empiricism tends to emphasise the tentative and probabilistic nature of knowledge.[167] This is distinguished from the backdrop of the first principles where these principles are taken as real elements of the foundations of knowledge.

163 See S. Kaye, "William of Ockham," *Internet Encyclopedia of Philosophy*, January 3, 2007, <http://www.iep.utm.edu/ockham/> (accessed September 15, 2010).

164 See J. J. Sanguineti, *Logic and Gnoseology* (Rome: Urbaniana University Press, 1988), 150.

165 See E. J. Lowe, "Nominalism," in *The Oxford Companion to Philosophy*, 660.

166 See D .W. Hamlyn, "Empiricism," in *The Encyclopedia of Philosophy*, Vols. I and II, 499–500.

167 We mention here that the tendency to 'probabilistic knowledge' indicated above is more or less general among empiricists, with individual or particular nuances and eccentricities according to the proponents. For more explication on this see N. P. Wolterstorff, "Empiricism," in *The Cambridge Dictionary of Philosophy*, 224–225.

However, several empiricists recognise the existence of some *a priori* truths (e.g. mathematics and logic)[168] and that some knowledge is *a priori*, or independent of experience, but they deny that any concepts are.[169] The reason is that empiricists seek evidence through immediate experience rather than through intuition or reasoning. This implies that there is no place for first principles in their conception, because first principles have fundamental truth-values. This constitutes concordance difficulty between the empiricists (empiricism) and metaphysical realists/epistemologists who believe, instead, in the existence of fundamental universal truths and the acquisition of real knowledge rooted in the intellect.[170]

Furthermore, according to most empiricists, experience includes inner experience-reflection upon the mind and its activities together with sense perception. This position marks it out as an antithesis of rationalism since it denies the existence of innate ideas.[171] Moreover, empiricism does not limit itself to the presupposition that all knowledge has sensual origin but reduces intellectual knowledge to sensible perception.

Hume, the most prominent protagonist of the empiricists, is known for his scepticism in metaphysics.[172] Hume's reduction of ideas to simple 'impressions'

168 John Stuart Mill was the first to treat even these as generalisations from experience. Empiricism is a dominant phenomenon in the tradition of British philosophy, and there it found its most prominent advocates. See J. Dewey, *Essays on the New Empiricism:* 1903–1906, J. A. Boydston et al., eds. (Carbondale: Southern Illinois University Press, 1977), 63.

169 The non-conceptual belief brings the empiricists' doctrine into conflict with the theory of the first principles that in accordance to reality recognises these principles as essential intuitional concepts.

170 See J. Dewey, *Essays on the New Empiricism*, 168–170. See also Barry, *Hume* (London: Routledge, 1977), 220–221 for the empiricists' anti-metaphysical tendency.

171 See J. Dewey, *Essays on the New Empiricism*, 130–131.

172 The following excerpt from Hume's *Enquiry* partly depicts his anti-metaphysical disposition: "But this obscurity in the profound and abstract philosophy, is objected to, not only as painful and fatiguing, but as the inevitable source of uncertainty and error. Here indeed lies the justest and most plausible objection against a considerable part of metaphysics, that they are not properly a science; but arise either from the fruitless efforts of human vanity, which would penetrate into subjects utterly inaccessible to the understanding, or from the craft of popular superstitions, which, being unable to defend themselves on fair ground, raise these entangling brambles to cover and protect their weakness. ... The only method of freeing learning, at once, from these abstruse questions, is to enquire seriously into the nature of human understanding, and show, from an exact analysis of its powers and capacity, that it is by no means fitted for such remote and abstruse subjects. We must submit to this fatigue in order to live at ease ever after: and must cultivate true metaphysics with some care, in order to destroy the false and adulterate. ... Accurate and just reasoning is the only catholic remedy, fitted for all persons and all dispositions; and is alone able to subvert that abstruse philosophy and metaphysical jargon, which being mixed up with popular superstition, renders it in a manner impenetrable to careless reasoners, and gives it the air of science and wisdom." Hume, *Enquiry*, 11–12. Cited from "David Hume (1711–76): An Enquiry Concerning Human Understanding," in *The Harvard Classics* 1909–14, <http://www.bartleby.com/37/3/1.html>, accessed April, 2011.



gives room to serious lacunae in his thesis. Humean empiricism leads him to the supposition that 'perceptions' of the mind are divided into 'impressions' and 'ideas' (with the exception of the degree of intensity, these are similar), in which case, the ideas are simply the representations of the impressions. Internally, everything for Hume occurs in the form of conjectural temporal diversity. Hence, he says: "I never catch myself at any time without a perception, and never can observe anything but the perception."[173] Thus, the Humean ideas become by-products of the imagination and memory, following the laws of association, namely: 'similarity', 'spatial contiguity' (proximity), and 'temporal succession'. This entails that nothing like 'substance' exists, because for Hume the word 'substance' only denotes an assortment of simple ideas mutually joined by habit; likewise, general ideas are non-existent.[174] Humean submission on 'judgment', at large, negates crucial facts about the Aristotelian/Thomistic first principles. He suggests that while the mind simply carries out a confrontation between ideas, a problem of existence does not occur: hence, without referring to experience and with absolute certitude, a comprehensible intuition produces a necessary rapport. Contrarily, data of fact lack absolute certainty since modifications are always possible. Subsequently, we are not capable of *a priori* knowledge of the future with simple analysis of ideas since only experience provides this certitude. The analytical propositions, therefore, concern the relation of ideas and are *a priori*, while the synthetic propositions are about truth of fact and are *a posteriori*.[175]

Hume further criticises the concept of causality. Concerning the truth of fact, the only approach "beyond immediate experiences" is causal reasoning, which takes the form of demonstration in mathematics and causal probable inference in physics. Evidently, there is always a mediate or an immediate 'contiguity', just as similarly there is a 'temporal sequence' amid entities subject to the cause-effect relation, because the effect is temporally preceded by the cause. Nevertheless, given the fact that existing things have beginnings which may be random, Hume perceives no necessity for the existence of a 'necessary cause'.[176] For Hume, it is illogical that the principle of causality follows from analytical knowledge. This is rooted in Hume's conviction that two things are two logically isolated diverse ideas, which also can be thought of separately without the thought of one implying the other.[177] With his representation, Hume establishes pure experience of facts as the only grounds for causality and not the necessity of any law. Experiences only are random and only underscore coincidences with the lack of

173 Hume, *Treatise of Human Nature*, 1, 4, 6.

174 See J. Broackes, "David Hume," in *The Oxford Companion to Philosophy*, 403–407.

175 See J. J. Sanguineti, *Logic and Gnoseology*, 164.

176 See J. Broackes, "David Hume," in *The Oxford Companion to Philosophy*, 403–407.

177 Hume, like most empiricists, considers natural association of events as simply brute regularities which lack intelligibility in principle. For further reading, see M. Ayers, *Locke: Epistemology and Ontology* (London: Routledge, 1991), 155–156.

sequential continuity. As a result, the principle of causality is simply a habit and tied to a belief (faith).[178]

Additionally, Hume outlines what he sees as practical scepticism in which he proposes the certainty of 'faith' to save him from the delusion of radical scepticism. Knowledge, as such, entails 'belief'. Hence, 'belief' becomes the only criterion for the certainty of any acquisition of knowledge. Subsequently, with Hume's psychological empiricism, as an agnostic, the knowledge of God also becomes problematic because everything is discernible and justifiable solely from empirical data. The role of intellect is limited and does not go beyond the realm of mathematics. Reasoning is not to be exaggerated outside mathematical field, since reason disaggregates.

Hume's representation of empiricism together with other empiricist positions has no regard for the first principles because the principles of causality, likewise other fundamental principles, are not 'logical'. With his scepticism/theory on causality, Hume largely enhanced the problem of induction in the modern context. We will not go into that, as it does not directly constitute the scope of inquiry herein.

### *C.2 Rationalism*

Some other lines of thought, such as rationalism, recognise first principles only as non-realistic principles.

Rationalism is the philosophical view that propounds reason as the main source of knowledge. As we pointed out earlier, it is an antithesis of empiricism. Rationalists believe that the human mind can independently apprehend some truths directly without the aid of the senses. By the assertion that a category of truths exists which the intellect grasps directly, rationalists maintain that reality itself is inherently logically structured. There are varied forms of rationalism; we will sample just a few, to see their connectedness with the theory of first principles.

In the area of epistemology, rationalists suppose that most knowledge proceeds through direct intellectual apprehension. They insist that the intellectual faculty apprehends the universals and their relations, namely, objects that transcend the sensual perception. That these objects, indeed, defy sensible perception does not rule out their immanent and crucial existence. Rationalists, therefore, suppose that these abstracts and their relations can be simply thought about. For the rationalists, this is the most important sort of knowledge whereby the whole of logic and mathematics with their relations are of paramount importance because, with their use, the mind of man grasps the most certain kind of knowledge.

178 See W. E. Morris, "David Hume," in *Stanford Encyclopedia of Philosophy* <http://plato.stanford.edu/entries/hume/>, (May 2009), accessed September, 2010.



This *a priori* knowledge is universal and a necessity because it gives no room for exceptions. Epistemological rationalism finds expression also in the critical philosophy of Kant with his assertion that the mind uses its own inherent forms to make imposition on germinal experience. Rationalism even finds a footing in the ethical realm; the ethical rationalists hold that *a priori* reason renders the ultimate judgment in matters of good and evil, and not feeling, authority, or convention.

Rationalism in philosophy is an innovative modern trend born of René Descartes' 'criticist' philosophy.[179] It is an outcome of Descartes' dissatisfaction with the classical and scholastic philosophy, that according to him, invariably leads to scepticism. For rationalists, scepticism must be refuted at all costs in order to establish real grounds for absolute certainty in knowledge acquisition. Traditionally, in the history of philosophy, rationalists (like Descartes, Malebranche, Spinoza, Leibniz) had the vision of a knowable universe, of a holistic unity of laws that govern parts of the whole, of minds meant to know the cosmos and, subsequently, of the essentials of science.

In rationalism the first principles are seen as *a priori* intuitions or analytic propositions. The contemporary thought sees them instead as mere hypotheses, conjectures, and rules. This is an implication that, in the modern conception, the real gnoseological immediateness of the first principles has been completely overtaken.

### *C.3 Idealism and Kant*

The idealistic theory initially is the view that every existent thing is mental or that everything that exists is the mind or owes its existence to a mind. And so, the idealists maintain that there is no access to reality except mental provision;[180] we observe here, however, that reality is not reducible to our mental constructs and that there is more to reality than our mental world. Idealism is born when nominalism, scepticism, rationalism and so on terminate in or arrive at a crisis of truth. Idealism (especially absolute idealism) at that stage becomes a real metaphysics instead of an ordinary theory of knowledge; this is to say that it determines the sense of origin and 'being' whereon the principle of origin is the thought process and 'consciousness'. 'Being' becomes not just immanent to consciousness but also a partial or total product of consciousness. Consciousness, at this point, is 'divinised' because it acquires a creative capacity.[181] In this way, we can confirm

179 Descartes is considered a rationalist because his basic philosophical submission on metaphysics (first philosophy) is rationalistic, while his physics and physiology are empiricistic and mechanistic.

180 See D. W. Hamlyn, "Idealism Philosophy," in *The Oxford Companion to Philosophy*, 414–415.

181 See J. J. Sanguineti, *Logic and Gnoseology*, 169.

that idealism has a propensity to 'divinise' the human consciousness, which rules out the actual authenticity and reality that it pretends to seek. We perceive too that it is a real contradiction to the idea of the first principles built on reality.

Kant was fundamentally an idealist because he provides the initial conceptual system for German idealism. Without jeopardising the validity of scientific principles, he conveniently posits the mind's priority over nature. With his transcendental idealism, Kant proposes that all theoretical (scientific) knowledge is a mixture of the given from sensation and the mind's contributions, of which the latter are necessary conditions for any sense experience.

According to Kant, philosophy is a critique of knowledge for the demonstration of the limits of reason in order not to allow it to over dogmatise its limits above experience.[182] Kant's further belief is that there is a world independent of the mind and totally unknowable by it. For Kant, this world comprises unknowable 'things-in-themselves'.[183] With his doctrine that lures him to minimal realism, Kant finds Berkeley's unbending idealism implausible; hence he rejects 'the absurd conclusion' of the possibility of an appearance without anything appearing. Kant inverts the traditional epistemological relation between the mind and the world because he ascribes to the mind multifarious aspects of reality that many existing theories presumed as given in or derived from experience. Moreover, he thinks that knowledge arises from the conformity with the requirements of the human sensitivity and rationality, instead of the traditional belief in the mind's accommodation of itself to the world. Kant equates his evolutive action in epistemology to the Copernican universal astronomical revolution.

Synthetic *a priori* knowledge is the core of Kant's epistemological proposal, through his belief that knowledge is independent of all particular experiences; he argues further that such *a priori* notions are assumed by the actual likelihood of experience. He asserts that the main motive of his transcendental idealism is to demonstrate the possibility of the synthetic *a priori* propositions.[184]

Kant, above all, criticises metaphysical concepts, which surpass experience; according to him, concepts, such as substance and cause, are only valid when applied to phenomena, while the three rational ideas (soul, world, and God) are illegitimate because they do not correspond to any phenomenal experience. He sees them not as competent categories for synthesis of objects but as 'regulatory ideas' of the investigation. This is a direct contrast to the realistic notion pertaining to the pure (true) knowledge of the intelligible aspects of reality, which proceeds from and goes beyond the sensible to the abstraction and assertion of reality

182 See J. J. Sanguineti, *Logic and Gnoseology*, 175.
183 See D. W. Hamlyn, "Idealism Philosophy," in *The Oxford Companion to Philosophy*, 414–415.
184 See A. Stroll, "Epistemology," in *Encyclopaedia Britannica*, <http://www.britannica.com/EBchecked/topic/190219/epistemology>, accessed September, 2010.



itself and, analogically, reaches God's own existence through causal reasoning.[185] Kant's proposal contradicts the first principles realistically interpreted.

Even so, Kant assents to significant metaphysical truths ruling out theoretical and intellectual models and consenting, instead, to the practical and voluntary way. He thinks that just as human beings experience the phenomenal world as a system spatially and temporally defined and completely determined by causal laws, they cannot, in effect, have any theoretical (scientific) knowledge of God, the immortality of the soul, and human freedom.[186] Reality finally appears for the assertion of such belief and, like Hume, this is the point of practical and rational faith: the full expansion of 'Practical Reason' that is beyond the theoretical realm as long as it is bound to phenomena. For Kant, only on this ground can there be belief in these ideas because they are necessary conditions of our moral principles.

In conclusion, we note that, in Kant, metaphysical principles are like 'regulative ideas', and moral principles are absolute. With respect to persons, in his 'categorical imperative', Kant posits 'innate moral duty' as *species* of first ethical realistic principles. Kant asserts that the fundamental principle of our moral duties is a 'categorical imperative'. It concentrates on the morality of actions while ignoring the consequences of such actions. This is absolutised since the morality of an action disregards the situation in hand. Kant illustrates the will as operating on the basis of subjective volitional principles that he calls 'maxims'. And so, morality and other rational demands are requirements, which pertain to the maxims that motivate our actions. This proposal in Kant can be contrasted with the Thomistic 'synderesis', which is an innate habit.

### *C.4 Modern Axiomatism*

The axiomatic method entails the replacement of a consistent group of propositions (e.g. a mathematical theory) by axioms. They are arranged in such a way that the first group of propositions is deduced from the axioms. Starting from the ancient Greek classical period, the axiomatic method was often discussed as if it were a unitary method, or homogeneous procedure. Euclid's method was generally assumed for many centuries until the beginning of the nineteenth century in European mathematics and philosophy. Aristotle's version of evidence, as demonstrative argument, is well suited to the structure of classical geometry as axiomatised in Euclid. In this traditional approach, axioms were thought to be self-evident and so indubitable before the development of Non-Euclidean geometry and the foundations of real analysis. Through Russell's and Whitehead's

185 See J. J. Sanguineti, *Logic and Gnoseology*, 175.
186 See A. Stroll, "Epistemology," in <http://www.britannica.com/EBchecked/topic/190219/epistemology>, accessed September, 2010.

*Principia Mathematica*, Cantor's set theory and Frege's work on logical foundations, and also Hilbert's 'new' implementation of axiomatic method for research, we see the claim that first principles are merely formal, not based on intuitions. With their logicism, Russell as well as Peano tried to demonstrate that all mathematical theories could be reduced to some axiomatic tenets. Hilbert's axiomatism, on the other hand, requires formalisation of mathematics in axiomatic form, with a proof that this axiomatisation is consistent. This was the modern tendency before the advent of Gödel's theorem that completely overturned the original system based on Aristotle's.

Kurt Friedrich Gödel, our model for modern axiomatism generally accepted as one of the most important logicians of our times, established the modern metamathematical epoch in formal logic. His incompleteness theorems significantly stand as a landmark in the realm of logic since the Aristotelian era. In his philosophical contribution, he defended and formulated mathematical Platonism, which involves the view that mathematics is a descriptive science, and the notion of mathematical truth is objective. Based on this conviction, he originated the program of conceptual analysis within the set theory. Gödel's philosophical views can be broadly classified into two: namely, realism seen in the belief that mathematics is a descriptive science like the empirical sciences except that the theorems do not address the area of empirical or abstract facts; the second is his bent to the Leibnizian kind of rationalism.[187]

Generally, the following statement is implied by the notion of Gödel's theorem: "In any formal system adequate for number theory there exists an undecidable formula – that is, a formula that is not provable and whose negation is not provable."[188] This theorem sometimes is referred to as the first theorem of Gödel and the undecidable formula is occasionally affirmed as true.

The upshot to the theorem considered, sometimes, also, as Gödel's theorem or as his second theorem holds that, "the consistency of a formal system adequate for number theory cannot be proved within the system." [189] The two theorems are appropriately referred to as 'incompleteness' theorems because each one demonstrates that for any number of a particular class of formal systems, there exists a formulable statement in its language that defies its proof but that remains desirable to evoke its proof. [190]

187 See J. Kennedy, "Gödel's Theorem," in *Stanford Encyclopedia of Philosophy*, <http://plato.stanford.edu/entries/goedel/#PhiArg>, (February 2007), accessed September, 2010.

188 See J. van Heijenoort, "Gödel's theorem," in *The Encyclopedia of Philosophy*, Vols. III and IV, 348.

189 See J. van Heijenoort, "Gödel's theorem," in *The Encyclopedia of Philosophy*, 348. The two theorems are imprecise expressions of the generalisations of results in K. Gödel, *Über formal unentscheidbare der Principia Mathematica und verwandter Systeme* I, in 1931.

190 See M. Detlefsen, "Gödel's Incompleteness Theorems," in *The Cambridge Dictionary of Philosophy*, 298–300.



Gödel's discovery is amazing because of its significance to the existing formal/mathematical systems. With the assumption that every mathematical proposition is either true or false implying that there is no completeness in a formal system, formal systems become weakened in truth-value, and abstract objectivity.

Epistemologically, Gödel's novelty, seen in the proposal of 1931, was a significant turn in the history of logic. Frege's concept of formal deductive systems has been seen as affirmed as the standard of precision in the foundations of mathematics. That seemingly encompassed the Aristotelian ideal of first principles' deductive method but only as far as first principles were thought of as purely formal, which is contrary to Aristotle's view. Gödel's propositions and results in demonstrating that mathematics is not totally and consistently formalised in one system, shattered the formal model. Mathematical bounds as a result are not of one formal scheme.

Gödel's theorem appears to have gained ground in the entire entity of human knowledge abandoning the rationalistic general belief in one mathematical system, because mathematics is often seen as a paradigm of rational knowledge for other sciences. For some, the former system of deductive reasoning is no longer maintainable with the new discovery. Of course, apart from mathematics that is amenable to complete formalisation, the innovation of Gödel's theorem is remote to other sciences.[191] Nevertheless, Gödel's discovery puts an end to the inflationary character of modern formal axiomatism. Formal logic and mathematical principles are not decisive. We observe that the aforementioned system has little in common with the realistic structure of the Aristotelian and Thomistic first principles.

### *C.5 Popper and the Problem of Induction*

Aristotle hoped that first principles could be discovered through 'induction'. An inductive inference is the generalisation that results from counting individual objects or events. The 'Problem of Induction' is the realisation that we can never know 'how many' individuals or events we 'need' to count before we are 'justified' in making the generalisation.[192]

According to Francis Bacon, empirical science uses induction. The views of Bacon had great influence on many modern scientists until contemporary time. Bacon cannot answer the objection that induction never proves anything. In inductive inferences, observations are premises while theories are conclusions.

191 See J. van Heijenoort, "Gödel's theorem," in *The Encyclopedia of Philosophy*, 348–357.

192 See K. L. Ross, *The Foundations of Value, Part I, Logical Issues: Justification (quid facti), First Principles, and Socratic Method*, <http://www.friesian.com/foundatn.htm#>, (2006), accessed May, 2010. We observe here that Ross's comparison of Aristotle's induction with the modern conception is a gross misunderstanding of the Aristotelian notion as we discover herein.

Hume worsens the issue by his refutation of induction, and no one else could propose better hypotheses.[193]

Hume's opinion is that if 'reason' implies logic, it only means 'consistency'. Even so, in principle, there can be an infinite number of regular logical systems. Since Hume also thinks that all first principles are established by habits or sentiment, he properly asserts that, "Reason is and ought to be the slave of the passions." However, Aristotle, and others like Plato and Kant may signify more by 'reason' than mere 'consistency'.

We observe here, however, that Ross' comparison above of the Aristotelian induction with Bacon's is improper, because the modern scientific induction has nothing to do with Aristotelian induction (*epagôgé*), which is more an abstraction of the universal concept from sensible experiences.

Bearing in mind the above, we come to examine Karl Popper, who is regarded as one of the most significant philosophers of science of the 20th century who merited the title of a philosophical master by his substantial contribution in the field. Popper was first associated with the Vienna Circle because of his earlier works, since he shared just their interest in the distinction between science and metaphysics. He considered it nonsensical to approach science and philosophy by a language analysis or meaning. He took the sceptical Humean stand in induction. It is impossible to verify and at most to affirm a universal scientific theory with positive degree of probability. The best is the disapproval of a universal theory.[194] For Popper, science is a hypothetical deductive process by which scientists work out theories and assumptions that they test through the derivation of specific observable resultants. Theories are not properly verified. They are better falsified and denied or provisionally acknowledged in the want of falsification following Popper's sort of tests.[195] Falsification has better grips where positive proof lies beyond us. Popper's view on induction that he proclaimed and argued in *Logik der Forschung, (Logic of Scientific Discovery)*[196] is one of the most influential and controversial theories on scientific induction. According to Popper, in his 'critical rationalism', induction is invalid in the logic of science. Hence he says:

193 See K. L. Ross, *The Foundations of Value, Part I, Logical Issues*, <http://www.friesian.com/foundatn.htm#>, (2006), accessed May, 2010.

194 See A. O'Hear, "Popper and the Problem of Induction," in *The Oxford Companion to Philosophy*, 739. Falsifiability correlates approximately with models in which a theory is falsifiable. On a general note, most falsifiable theories produce stronger claims and are more informative.

195 See J. Vickers, "The Problem of Induction," in *Stanford Encyclopedia of Philosophy*, <http://plato.stanford.edu/entries/induction-problem/>, (June, 2010), accessed September, 2010.

196 For further reading, see Popper's entire manual, *Logik der Forschung* (Vienna: Julius Springer Verlag, 1935). [*Logic of Scientific Discovery* {*LSD*}) translation of *Logik der Forschung* (London: Hutchinson, 1959)].



> A theory of induction is superfluous. It has no function in a logic of science. The best we can say of a hypothesis is that up to now it has been able to show its worth, and that it has been more successful than other hypotheses although, in principle, it can never be justified, verified, or even shown to be probable. This appraisal of the hypothesis relies solely upon deductive consequences (predictions) which may be drawn from the hypothesis: There is no need even to mention 'induction'.[197]

Popper adopts Hume's conclusion on the non-justifiability of induction. By so doing, Popper prominently thinks that he has solved the persisting problem of induction, but only a handful of authors agree. The problem was posed by Hume's argument that every evidence-transcending belief is unreasonable because induction is invalid and it is only realistic to believe what is justifiable by negative tests.[198]

On an epistemological stance, we think Popper addresses almost solely scientific knowledge. For Popper, it is like an imperative for one to study scientific knowledge in the quest for the growth in knowledge. For he maintains that:

> most problems connected with the growth of our knowledge must necessarily transcend any study which is confined to common-sense knowledge as opposed to scientific knowledge. For the most important way in which common-sense knowledge grows is, precisely, by turning into scientific knowledge.[199]

Initially, Popper was anxious about the concept of truth, so in his earliest writings he carefully evaded the assertion that a corroborated theory is true. For this reason, Popper limited himself to the argument that a theory that is falsified is false and is known as such, and also that a theory that takes the place of a falsified theory is a better theory than its predecessor. Therefore, he came to the acceptance of Tarski's reformulation of 'the correspondence theory of truth'. And so, through 'conjectures' and 'refutations' he combined the notions of truth and content in the formulation of the metalogical concept of 'verisimilitude' or 'truthlikeness'. Hence, Popper upholds that a 'good' scientific theory has a higher degree of verisimilitude than its opponents. He explicates this notion by reference to the logical consequences of theories.[200]

197 Popper, *LSD*, 315.

198 This is a kind of Kantianism in Popper and, actually, it is rather like what Immanuel Kant says in the *Critique of Pure Reason* under "The Regulative Employment of the Ideas of Pure Reason." See also Kant, *CPR*, A 646–647.

199 Popper, *LSD*, 18.

200 See S. Thornton, "Karl Popper," in *Stanford Encyclopedia of Philosophy*, <http://plato.stanford.edu/entries/popper/>, (February 2009), accessed September, 2010.

Following the above, we perceive that Popper's evolution of thought and science brought about an approximation to the notion of truth (verisimilitude). According to that premise, we can only know our errors with certainty, in close proximity to truth, without achieving it completely. Popper's notion of truth is realistic, in other words, the mind's correspondence to reality. Nonetheless, for Popper, truth is like the Kantian regulative idea, something always beyond, which we can come closer to every time that we substitute our old errors with new theories. Thus, he often consents to a more flexible Kant. Instead of starting from experience, knowledge for him begins with invented ideas, which become better as a consequence of solidity but not from experience. Since the clash with reality is negative, his Kantianism becomes compatible with realism, because the truth is always 'over there' like a light that guides without being possessed. We see here Popper's gnoseological weak point in the impossibility of the ability to know with assurance at least one truth. Knowledge turns to δόξα, an opinion, whose contrary view is to fall into dogmatism. This δόξα is, perhaps, sustained by 'faith' (Popper cleverly avoided a subjective stand on any inquiry), from a certain 'regulative idea', but not from a true intellective knowledge. The intellect is not beyond verisimilitude. Science is a human construction guided by truth as a 'regulative idea'. For Popper the ideas are conjectures or notions sustained by 'faith'. Thus, Sanguineti justifiably thinks that Popper should have recognised that the human person has the ability to know fundamental truths about objective reality.[201]

Although Popper refutes Scepticism with passion, it is inevitable for him not in the sense of not believing in anything. Human beings are fallible. We think that the Popperian absolutisation of the fallibility is not justified. The notion of fallibility and error in human beings, as we know, presupposes humanity's basic inclination to truth. This fundamental epistemological lack in Popper's hypotheses of critical rationalism makes his philosophy to hang in the air. From the moment of his avoidance of recourse to the sources of truth, he falls into the problems he would ordinarily want to evade. Popper sees philosophy only from the point of view of the sciences and so tends to extend the critical method to it.

Finally, we affirm that Popper's exposition lacks the realistic principal ingredient in the Aristotelian discourses on the first principles. What Popper regards as 'faith' is very close to Aristotle's conception of *nous* through which the first principles are grasped. Thus, 'faith' for Popper could be likened to the Aristotelian *nous*. Ultimately, they cannot agree since they are mutually opposed.

201 See J. J. Sanguineti, "Karl Popper: Congetture e confutazioni," in *Cultura & Libri* 86 (1993), 13–33.



## D. Conclusion

In this chapter, we have considered principally the philosophical background of the first principles starting from the classical Greek era with the Sophists through Plato to Aristotle, the architect of the first principles. We traced the historical response to these first principles through the medieval period precisely with a model patristic philosopher, Augustine. We then came to some modern and contemporary tendencies towards the first principles viewed from an Aristotelian perspective. For the aforementioned concluding epoch, we examined a representative group of philosophers from diverse schools of thought, mainly with the problem of the universals and logical systems, like Ockham–nominalism and David Hume–empiricism, rationalism and Kant–idealism, Gödel–axiomatism and, lastly, Popper regarding the problem of induction.

We implicitly inferred that the first Aristotelian realistic principles (acknowledged or unacknowledged) are and remain as archetypes of 'being' despite contrary postulations. These principles are indispensable basic truths on which the structure of reality itself rests. Bearing in mind, then, our discourse in this chapter, we hope, in the following, to begin with our main treatise on the inquiry of Aquinas' crucial import on the first principles.

# Chapter 2
# The First Principles in the Works of Saint Thomas Aquinas

## A. St. Thomas Aquinas

In our First Chapter, we had a rapid investigation on the historical setting of the first realistic principles as recommended by Aristotle. We tried to situate the problem of various opponents of these first principles especially in the modern era. We examined different philosophical perspectives where the first principles are merely considered in terms of logical formulae and verbal formulations. We hope, in the present chapter, to discover and locate the said first principles in the works of Thomas Aquinas. Our intention also is to consider the significance of the Aristotelian first principles in Aquinas' philosophical system. Our inquiry in this chapter will be more metaphysical/epistemological and psychological than logical. This is to say that we will chiefly examine the principles' propinquity to being and the actual mechanism of our mind through the principles.

Various erudite scholars through the centuries have dredged up and interpreted in profundity several aspects of Aquinas' principal thoughts in philosophy. Even so, we think that the first Aristotelian principles, one of the core arguments of Aquinas' Aristotelian tendency, still remain inadequately investigated. Aquinas became the man that Christianised Aristotle and introduced elements of creation in the preferred doctrine of Aristotle on the first principles to sustain the substantial unity, providence, and immortality of the soul, and to demonstrate, above all, that by the acceptance of Aristotle's assumptions, great foundational truths of Christianity remain intact.[1] Moreover, these facts are [or can be] supported by and through the fundamental realities, like the first principles. Additionally, Aquinas showed that these basic truths found their strongest natural footing and support in Aristotelian propositions and theories. Through his philosophical works, Aquinas, as it were, found a system in which many truths of Christianity constitute what we can call *preambula fidei*. In a nutshell, Aquinas fine-tuned, developed, and assimilated the Aristotelian notions into a holistic thought adaptable to Christianity, especially on the basis of the first

1 See B. Mondin, *La metafisica di S. Tommaso d'Aquino e i suoi interpreti* (Bologna: Edizioni Studio Domenicano, 2002), 14–16.

principles. It is highly impressive, therefore, to note the intellectual subtlety with which Aquinas reconstructed and reworked some of the ingenious Aristotelian principles and philosophical thoughts.[2]

### *A.1 The Aristotelian Import on Thomas Aquinas' Works (First Principles)*

Initially in the thirteenth century when Aristotle became recognised as the metaphysician, the author of *Physics* and *Metaphysics* and the *Ethics*, university teachers were prohibited to teach Aristotle, and scholars were not allowed to read him for the fact that Aristotelian science was not part of the Christian tradition.[3] When, later, Aristotle's philosophy became part of the Christian philosophy, Aquinas borrowed much from the Arabic speculations of Averröes.[4] Although there gradually appeared other scholars who studied and translated the Greek Aristotelian texts, Albert the Great becoming the most renowned, Aquinas, even without enough knowledge of Greek, later embarked on the original Aristotelian texts' translations through the help of Henry of Brabant and William of Moerbeke. By so doing, he expressed Christian doctrine in Aristotelian terminology and he further employed Aristotelianism as a tool for both theological and philosophical analysis and synthesis.[5] Thus, Aristotle would not have enjoyed the fame for which he is known today and to which Aquinas consequently subscribed if translations were only based on the Arabians' view.

Aquinas kept himself, to an exceptional degree, distant from the political events of his era. Nevertheless, the same detachment was not feasible for him in the contending worlds of thought. For Aquinas to be a coherent Aristotelian, which he was, he had not merely to combat the pagan Aristotelian exponents, but also to protect

2 See É. Gilson, *The Philosophy of St. Thomas Aquinas* (Cambridge: W. Heffer & Sons Ltd., 1924), 11–15.

3 As Christendom became more autonomous and had little in common with anything outside the Church, the new Aristotelianism was an ingredient of the Averroistic view, which in Europe generated a strong separation between faith and science. We note also that Jews, the Syrian Arabs, Egyptians and some parts of the Spanish territory, centuries earlier, enjoyed and commented on the Aristotelian *Metaphysics* before it was assimilated in European Christian philosophy.

4 We mention, however, that in as much as Aquinas was influenced by Averröes to the extent that he calls Averröes the Commentator, he was also selective and cautious about Averröes' assumptions, because of the incongruent nature of some parts of the Arabic commentary on Aristotle with objective truth. For instance, Averröes propounds the eternity of matter, the intelligence of heavenly spheres and, above all, that the human intellect was numerically one; hence, the non-immortality of individual persons (souls).

5 See F. Copleston, *A History of Philosophy*, Vol. II (London: Image Book, Doubleday, 1993), 302–311.



himself against the reprimands of other Christian thinkers more unadventurous than himself.[6]

Following the above, one can readily understand that the milieu of time and place in which each thinker lives affects the person's system of philosophy, and Thomism is not an exception. Aquinas, a fairly straightforward writer, is also viewed by some recent scholars as difficult to grapple with because of the structure of his writings. To that, we simply assert that immediately one comes to grips with the fundamental principles that govern all Aquinas' thought, his princpal works become pretty easy to read. Some problems may then come, not from want of knowledge of the authors to whom Aquinas referred, but from other factors. Examples of difficulties may first arise from the uninterrupted link between Aquinas' philosophical and Christian dogmatic thoughts. This union of philosophy and theology is common to and characteristic of all the *Summae* of his age.

As already highlighted, when we affirm that Aquinas' philosophical works are largely affected by Aristotelian thoughts we do not intend to say that there is an absence of originality in Aquinas. In as much as some may judge him an Aristotelian adherent, Aquinas was not purely an imitator but demonstrates his innovation in the discovery of the truth in his own ingenious proposals. Hence, as a philosopher, Aquinas is emphatically Aristotelian with a difference. The acknowledgement of the major ingredient of Aristotle in Aquinas' philosophy is not a denial of other philosophical sources. Augustine, for instance, plays a vital role in the thoughts of Aquinas as well as Boethius, Pseudo-Dionysius and Proclus who were channels through which Aquinas imbibed Neo-Platonism.[7] We think that nothing is more perceptibly Aristotelian about Aquinas than his postulation that there is a specific thing to be discovered from every author, if nothing, at least errors to be avoided or corrected. In addition and in keeping with this view he says:

> But if any people want to write back against what I have said, I will be very gratified, because there is no better way of uncovering the truth and keeping falsity in check than by arguing with people who disagree with you.[8]

6 That Aquinas is today known as an Aristotelian is not to say that he is not novel in his views. Actually, he struck his contemporaries as the architect of a new methodology, original arguments, novel points of doctrine, innovative order of questions, and new light. It is, therefore, not astonishing to see him break with a tradition that in some minds was almost synonymous with Christianity and make an alliance with what was apparently Arabian. See also V. J. Bourke, "Thomas Aquinas, St.," in *The Encyclopedia of Philosophy*, Vols. VII and VIII, 105.

7 See V. J. Bourke, "Thomas Aquinas, St.," in *The Encyclopedia of Philosophy*, 105. We observe that Aquinas like other scholastics had almost no direct access to Plato's works. Augustine, Pseudo-Dionysius, and Proclus, etc. mainly influenced him. Unconsciously Aquinas absorbed a great deal of Platonism through them.

8 *De Perfectione Spiritualis Vitae*, 26.

Thus, he also assumes many non-Aristotelian features from other sources. In a nutshell, the varied sources in the Thomistic system led many to classify Aquinas' thought as an assorted potpourri; others, following his discourse on participation, described him as Platonic rather than Aristotelian; and, finally, others assert (to which we also subscribe) that, despite the presence of other notions of past philosophers, Aquinas remains fundamentally original.

Further, the admission that Aquinas is essentially Aristotelian is not the same as asserting that he is totally dependent on Aristotle. It simply implies that anything Aquinas adopts from other thinkers is something tacitly compatible with his basic inclination to Aristotle. Nonetheless, we also affirm here that the attention we drew to Aquinas' influence is not tracing his basic philosophy back to historical antecedents, or demonstrating his steady concordance with all his sources, especially in Aristotle's case. As we mentioned above, Aquinas' system enjoys a uniqueness that merited him the recognition he has today as a philosophical giant, especially of the schoolmen.[9]

In view of the preceding argument, we affirm that Aquinas' reference to Aristotle as the 'Philosopher' brought him to internalise some Aristotelian views on the first principles, time, place, and motion, Aristotle's account of sense perception and intellectual knowledge, and the Aristotelian verification of the prime mover and cosmology. Above all, Aquinas' commentary on Aristotle's *Metaphysics* is an evidence of his profound understanding of the Aristotelian philosophy and this treatise, in turn, is a complement for that hard text of Aristotle. Equally, his commentaries on the works of Aristotle, in general, are mainly for enhancement of his own in-depth appreciation of those works. We think also that this motivation helped Aquinas to get to the heart of the arguments Aristotle addressed, so to say, personalising them. Aquinas supports it with the argument that "the study of philosophy has as its purpose to know not what people have thought, but rather the truth about the way things are."[10] We cannot, therefore, give away the commentaries on a face value or *a priori* since their significance, for Aquinas, implies the assiduous task of filtering and interpreting, sometimes even to disagreeing (somehow) with Aristotle in order to augment the sense of the argument in question.[11] In addition to writing other commentaries on Aristotle's works, Aquinas often cites Aristotle to sustain some of his theses, even with Scriptural comments. Little wonder, then, about Aquinas' use of the word 'Philosopher' for Aristotle.

9 See F. Copleston, *A History of Philosophy*, Vol. II (London: Image Book, Doubleday, 1993), 302–311. See also V. J. Bourke, "Thomas Aquinas, St.," in *The Encyclopedia of Philosophy*, 105.

10 *In DC*, I, lect. 22, n. 8: "Studium philosophiae non est ad hoc quod sciatur quid homines senserint, sed qualiter se habeat veritas rerum."

11 See J. F. Wippel, *The Metaphysical Thought of Thomas Aquinas: from Finite Being to Uncreated Being* (Washington, (DC): The Catholic University of America Press, 2000), xix–xx.



To explicate the process of knowledge on an epistemological basis, Aquinas does not resort to the doctrine of illumination of Augustine or to Plato's inherent ideas, but he hypothesises a cognitive power naturally competent to acquire an understanding of an entity after Aristotle's model.[12] Similarly, Aquinas defines science in a loose sense like Aristotle but not in an identical form with him.[13] As part of his suppositions on science, Aquinas assumes that in the demonstrative process, the *certitudo* of *scientia* is produced.[14] As a realist, he concurs with the Aristotelian notion that knowledge is obtainable through two natural hierarchical orders, namely, the sensitive and intellective, respectively, which are closely linked. While the sensitive works directly with individual elements, the intellect operates with the intelligible and universals.[15] Thomistic submission on this argument, far from being subjective, enjoys the characteristic objectivity of a realist.[16] Moreover, the human intellect's immediate object is, according to Aquinas, the essential in the material substance.[17] Aquinas' hypothesis on the knowledge of the first principles in keeping with Aristotle finds firm footing (as we shall see) herein.

In his metaphysical inquiry, Aquinas, like Aristotle, affirms 'being *qua* being' in which rests mainly our inquiry on the first principles. Nonetheless, as the hub of his thought is essentially concrete and has a Christian bent, his emphasis on the 'first philosophy' led him to the proposal that first philosophy is directed basically to the knowledge of God as the end of all human knowledge (cognition) and the ultimate principle of reality. We witness here again in Aquinas an upsurge of originality in his metaphysics different from Aristotle's. Though Aquinas recognises and builds on the Aristotelian 'being *qua* being', his innovation is absolute in that he creates a new system of metaphysics. The new Thomistic metaphysical structure is founded on the intensive concept of being (*esse*), understood as pure (*esse ut actus*) instead of the usual *esse commune*. This distinguishes Aquinas' ontological expression.[18]

12 See H. Reith, *An Introduction to Philosophical Psychology* (Englewood Cliffs, N. J.: Prentice-Hall, Inc., 1956), 165–167. See also B. Mondin, *La metafisica di S.Tommaso d'Aquino e i suoi interpreti*, 233- 234 on Aquinas' Aristotelian instead of Augustinian tendency.

13 See E. Stump, *Aquinas* (London: Routledge, 2003), 235–242. See also *In I APst*, lect. 1, n. 4 & lect. 1, n. 41.

14 Aquinas, *In I APst*, lect. 1, n. 5: "Est enim aliquis rationis processus necessitatem inducens, in quo non est possibile esse veritatis defectum; et per huiusmodi rationis processum scientiae certitudo acquiritur."

15 See *SCG*, II, Ch. 60, *SCG*, II, Ch. 76 & *SCG*, II, Ch. 82 See also *ST*, I, q. 84, ad 1 & *ST*, I, q. 89, ad 1 etc. See also J. F. Wippel, *Metaphysical Themes in Thomas Aquinas* (Washington, (DC): The Catholic University of America Press, 1984), 57.

16 See R. A. O'Donnell, *Hooked on Philosophy: Thomas Aquinas Made Easy* (New York: Alba House, 1995), 2–7.

17 See F. Copleston, *A History of Philosophy*, Vol. II (London: Image Book, Doubleday, 1993), 302–311. See also *SCG*, III, Ch. 25; *In De Trin*, q. 5, a. 4; q. 6, a. 1.

18 See B. Mondin, *La metafisica di S. Tommaso d'Aquino e i suoi interpreti*, 16–17.

On the other hand, Aquinas' philosophy is permeated with metaphysical principles that are significantly Aristotelian, and he often cites and tacitly uses the principles in diverse propositions. Aquinas also avows two principles of being, potency and act. Whereas act portrays being in actuality and perfection, potency implies non-actuality, non-being, process of perfection, and imperfection.[19] Furthermore, with Aristotle, Aquinas accepts the composition of matter and form and the four causes in causality, which form part of our study of the first principles. Subsequently, Aquinas, like Aristotle, somewhat reduces the explication of the concept of reality to the notion of the four causes. As part of first philosophy, natural theology should be completely founded on "principles known by the natural light of intellect."[20] These types of principles are fundamental to Aristotelian metaphysics.

Susbsequent to the foregoing discourse and some other unarticulated reasons, we confirm that Aquinas had much in common with Aristotle. He so understood, internalised, interpreted, and developed Aristotle to the extent that even Irwin, an Aristotelian scholar, once recognised that Aquinas "actually explains Aristotle's intention more clearly than Aristotle explains it himself."[21] This explains why we can accordingly suggest that Aquinas is the Aristotle of the schoolmen and that both philosophies are concrete and often grouped together.[22] We shall, consequently, speedily examine Aquinas' notion on the first principles.

### *A.2 A Cursory Glance at the Theory of the First Principles in Aquinas*

The discourse on first principles is pre-eminently present in the philosophy of Aquinas. In this specific analysis of the first principles, Aquinas generally follows and develops the Aristotelian reflections. Aquinas does not employ the fundamental language of being but uses the idiom of his epoch that is Aristotelian and Platonic in the discovery of the first principles. This mode of presentation does not, however, confound the distinguished ontological character of the first principles.[23] Most of Aquinas' discourses on metaphysics and morality carry sections on the investigation of the first principles, as they are the foundations of all affirmations and negations. Aquinas like Aristotle gives a primary place and prominence to the metaphysical first principles of being. Aquinas considers these principles as 'first' principles because they are basically real and fundamental to

19 See R. A. O'Donnell, *Hooked on Philosophy: Thomas Aquinas Made Easy*, 11–13.

20 *ST*, I, q. 1, a. 2: "Quaedam enim sunt, quae procedunt ex principiis notis lumine naturali intellectus."

21 T. H. Irwin, "Who Discovered the Will?," in *Philosophical Perspectives 6: Ethics*, J. E. Tomberlin ed. (Atascadero, CA: Ridgeview, 1992), 467.

22 See R. A. O'Donnell, *Hooked on Philosophy: Thomas Aquinas Made Easy*, 6–7.

23 See B. Mondin, *La metafisica di S. Tommaso d'Aquino e i suoi interpreti*, 231–232.



every aspect of our knowledge. In effect, he gives them the first and most prominent place since they are 'ultimates'. The sense of their being 'ultimates' is not because we know them first (temporally). In Aquinas' idea, the first principles are named, as such, because our entire conceptual structural organisation is founded on them. Aquinas, therefore, refers to them often and regards them as *notissima* after Aristotle, who calls them *γνωριμωτάτην* since they are always present.[24] In accord with and commenting on Aristotle, Aquinas deduces that it is the task of metaphysics necessarily to examine the substances, as such, and all the first principles.[25] Hence, from the first principles as firsts in hierarchical order of reality, so to say, is the proper beginning of philosophising. Reference to the first principles is indispensable for any solid affirmation in order to avoid a simplistic hypothetical stance. Aquinas assimilates the Aristotelian avoidance to speak immediately of other principles by focusing mainly on the first of all principles and explains it thus: what is intrinsic in all beings and not only in the one or the other class of things is the subject matter to be studied by the philosopher.[26] For this reason, the philosopher studies all the principles and not just a class of the principles, whereas, the different sciences use these general principles only in so far as they are necessary for the examination of a particular aspect of reality. For Aquinas, this affirmation designates where to look for the ontological basis of the first principles, the science of being and its properties and, finally, in the First Unmoved Mover (translated into God) who transcends the material reality.[27]

Accordingly, Aquinas demonstrates the importance he attributes to the knowledge of these first principles by saying they are known 'immediately' (*statim*) when anything is known.[28] He further portrays the significance of the first principles by arguing that once a term is understood, assent to the underlying principle is given.[29] The reason is that the intellectual intuition, that is, a simple act expressed and consumed in a first and immediate judgment is the first principle.[30] Only through the first principles, then, as in groundwork, can a firm assertion be established to avoid mere theorisation. Although they defy definition, as such, the first principles find their general definition in the theory of knowledge. Hence, Aquinas says, "the word 'principle' signifies only that whence another

24 See P. J. Bearsley, "Another Look at the First Principles of Knowledge," in *The Thomist* 36 (1972), 566–598, 567.

25 See J. F. Wippel, *Metaphysical Themes in Thomas Aquinas*, 59–60.

26 The philosopher here implies the metaphysician, as metaphysics has an advantaged role of first philosophy. For further reading, see L. Elders, "The First Principles of Being in the Philosophy of St. Thomas Aquinas," in *Doctor Angelicus* 3 (2003), 59–96.

27 See *In IV Metaph*, lect. 3.

28 See *De Ver*, q. 1, a. 12.

29 See *In VI Ethica*, lect. 7, n. 1214.

30 See M. L. Buratti, "I principi primi secondo San Tommaso," in *Divus Thomas* (Piacenza) 108 (2005), 218–252, 223.

proceeds: since anything whence something proceeds in any way we call a principle."[31] Through this definition comes the certification that the first principles must carry their own evidence of veracity, such that none can contest them without their admission in the process. This notion of the first principles gives them implied precedence and concretises them. Aquinas does not proceed in a systematic elaboration of these first principles. However, he resorts to them always in the amplification of his metaphysical arguments. The reason is that the first principles correspond to nature itself and to the responsibility of being (*esse*).

Gilson, therefore, affirms that, for Aquinas, the absolutely first principle is a 'simple apprehension' and not a 'judgment'. Such an absolute principle is *ens*. To assert that *ens* is a first principle indicates primarily that every knowledge is that of a *habens esse*, and, without which, no knowledge is possible.[32] Thus, the philosopher is seen as directed principally to this fundamental point through which one can rise and discover the consequent. Aquinas confirms this view with a citation of Boethius by distinguishing different types of propositions. The first universal notion is that notion of *ens* in which all subsequent knowledge is resolvable. This is to say that in *ens* is every attempt on demonstration.[33] And so, first principles remain first in Aquinas' scale of preference to begin any worthwhile philosophical speculation. Equally, some people who are not aware of these explanations, as a result, ignore the principles that only the wise person (the true philosopher) knows. Hence, the first principles have prominence in realistic philosophy because, as principles, they support all other principles built on them. Above all, Aquinas affirms that the philosopher does not validate these principles but specifies the implication of their terms.[34] Aquinas, as such, depicts the distinctive position of the first principles in all his philosophical discourses.

## B. An Overview of the First Principles in Saint Thomas Aquinas' Works

As we previously briefly stated, the first principles are fundamental in Thomistic philosophy. Likened to the Aristotelian *archai*, the first principles are beginnings in all aspects of the core of Aquinas' philosophical discourses. The discourse on the first principles for Aquinas is all-embracing. According to Aquinas, the first

31 *ST*, I, q. 33, a. 1: "Nomen principium nihil aliud significat quam id a quo aliquid procedit, omne enim a quo aliquid procedit quocumque modo, dicimus esse principium."

32 See É. Gilson, "Les principes et les causes," in *Revue Thomiste* LII (1952), 39–63, 48–49.

33 See *ST*, I–II, q. 94, a. 2.

34 See *In IV Metaph*, lect. 3.



principles are the commencements[35] in being, either by way of participation or holistically. That is the reason for their correspondence to being. This implies that the first principles fundamentally are ontological in character. They are, in other words (as we somewhat indicated above) without justification in themselves (*quoad se*), but are maxims by which other things are authenticated. Hence, these first realistic (Thomistic) principles are self-verifiable. Moreover, Thomistic philosophy hinges on and is pervaded with the first principles, because Aquinas uses them for the definition of various realities; for example, being (*ens*), for participatory connotation, for morality and causality, for axioms, for logic and for the sciences in the form of judgments. The first principles are existent facts as well as judgmental maxims.[36] This implication is that every reality, either as an outcome of an existing reality or in an excellent form has a genesis and is traceable invariably to a subsisting origin.

The first Thomistic principles are, therefore, foundations and origins in being in the superlative sense or in the minor variety. These first Thomistic principles culminate in an unsullied perfect being (*Ipsum esse*) that Aquinas equated and designated as an originator, whom Christianity regards as God.[37] Subsequently, for Aquinas any philosophical inquiry consistently leads to the first principles.

In view of the foregoing, we come to the proper examination of the first principles in Aquinas' works. Aquinas demonstrates a clear distinction between the order of human knowledge and the order of being. He gives priority to the order of being (*esse*) and supplies two varieties of principles that are not completely coincident. These are principles of being (which are identical with the principles of knowledge) and the principles of knowledge that do not always imply the principles of being.[38] Nonetheless, to adequately study the former first principles, as Sanguineti underscored, we have to reduce them in some way to epistemic-ontological principles in regard to us (*quoad nos*). Further, given the ontological nature of most of the first principles in Aristotelian-Thomistic philosophy, the quest into them invariably concludes in the 'ultimate' real principle in respect to us (*quoad nos*) and first indemonstrable principle in respect to the universe (*quoad*

35 This is synonymous with *inchoatio* and *primum*, which is that from which something actually begins (starts to exist). See R. J. Deferrari, *A Latin-English Dictionary of St. Thomas Aquinas* (Boston: Daughters of St. Paul, 1986), 838–844 and R. J. Deferrari and M. I. Barry, *A Lexicon of St. Thomas Aquinas* (Baltimore, MD: Catholic University of America Press, 1948), 885. See also A. Livi, *Lessico della filosofia: Etimologia, semantica & storia dei termini filosofici* (Milano: Edizioni Ares, 1995), 109.

36 See P. J. Bearsley, "Another Look at the First Principles of Knowledge," 566–567.

37 See J. F. Wippel, "Metaphysics," in *The Cambridge Companion to Aquinas*, N. Kretzmann and E. Stump eds. (Cambridge: Cambridge University Press, 1993), 93–99.

38 See *ST*, I, q. 85, a. 3, ad 4: "Universale, secundum quod accipitur cum intentione universalitatis, est quidem quodammodo principium cognoscendi, prout intentio universalitatis consequitur modum intelligendi qui est per abstractionem. Non autem est necesse quod omne quod est principium cognoscendi, sit principium essendi…" See also *ST*, I, q. 15, a. 3.

*se*).[39] Subsequently, the first principles are based on *ens habens esse* grasped by intellectual intuition that we will shortly see.

Aquinas actually divides the principles into those knowable by all and other principles acknowledged by the wise that are learned. In his work, *In Libros Posterior Analyticos*, for instance, Aquinas submits that:

> However, in the case of some of these propositions the terms are such that they are understood by everyone, as 'being' and 'one' and those other notions that are characteristic of being precisely as being: for 'being' is the first concept in the intellect. Hence it is necessary that propositions of this kind be held as known in virtue of themselves not only as they stand but also in reference to us. Examples of these are the propositions that "It does not occur that the same thing is and is not" and that "The whole is greater than its part," and others like these. Hence all the sciences take principles of this kind from metaphysics whose task it is to consider being absolutely and the characteristics of being.[40]

Consequently, in support of his claim on the principles known only by the wise, Aquinas also says:

> On the other hand, there are some immediate propositions whose terms are 'not' known by everyone. Hence, although their predicate may be included in the very notion of their subject, yet because the definition of the subject is not known to everyone, it is not necessary that such propositions be conceded by everyone.[41]

We see also a parallel and a supplement to the aforementioned Thomistic proposal in the *Summa Theologiae* thus:

> Any proposition is said to be self-evident in itself, if its predicate is contained in the notion of the subject: although, to one who knows not the definition of the subject, it happens that such a proposition is not self-evident. For instance, this proposition, "Man is a rational being," is, in its very nature, self-evident, since who says 'man,' says "a rational being": and yet to one who knows not what a man is, this proposition is not self-evident. ... But some propositions are self-evident only to the wise, who understand the meaning of the terms of such propositions.[42]

39 See J. J. Sanguineti, *Introduzione alla gnoseologia*, 187.

40 *In I APst*, lect. 5, n. 7: "Sed quarundam propositionum termini sunt tales, quod sunt in notitia omnium, sicut ens, et unum, et alia quae sunt entis, in quantum ens: nam ens est prima conceptio intellectus. Unde oportet quod tales propositiones non solum in se, sed etiam quoad omnes, quasi per se notae habeantur. Sicut quod, non contingit idem esse et non esse; et quod, totum sit maius sua parte: et similia. Unde et huiusmodi principia omnes scientiae accipiunt a metaphysica, cuius est considerare ens simpliciter et ea, quae sunt entis."

41 *In I APst*, lect. 5, n. 7: "Quaedam vero propositiones sunt immediatae, quarum termini non sunt apud omnes noti. Unde, licet praedicatum sit de ratione subiecti, tamen quia definitio subiecti non est omnibus nota, non est necessarium quod tales propositiones ab omnibus concedantur."



Furthermore, in his treatise *In Libros Metaphysicorum,* Aquinas suggests that there are principles of being, of action and of knowledge, and the principle of morality and of logic.[43] This implies that the first principles are explored through the principles that express a fixed ontological state and those regarding potency and act. We also notice in this proposal other principles that are about participation, movement, coming to being, and causality. A group of the principles pertains to the intellect and to the will and their activities. As we mentioned earlier, in Aquinas, the arrangement of the principles is not sequential or tied to a set. Hence, a good number of the first principles can fall into more than one of the groups. Our attempt to group them is only an approximation and tends to demonstrate that Aquinas has more principles than ordinarily is appreciated. By so doing, we intend to underline the usefulness of the first principles in Aquinas' philosophy and any realistic philosophical enterprise.

Moreover, in other passages, Aquinas writes that both the complex and non-complex first principles are known spontaneously and naturally.[44] We think

42 *ST*, I–II, q. 94, a. 2: "Secundum se quidem quaelibet propositio dicitur per se nota, cuius praedicatum est de ratione subiecti, contingit tamen quod ignoranti definitionem subiecti, talis propositio non erit per se nota. Sicut ista propositio, homo est rationale, est per se nota secundum sui naturam, quia qui dicit hominem, dicit rationale, et tamen ignoranti quid sit homo, haec propositio non est per se nota. ... Quaedam vero propositiones sunt per se notae solis sapientibus, qui terminos propositionum intelligunt quid significant."

43 *In V Metaph*, lect. 1: "Ut dicatur principium illud, quod est primum, aut 'in esse rei', sicut prima pars rei dicitur principium, aut in 'fieri rei', sicut primum movens dicitur principium, aut in 'rei cognitione'."

44 *ST*, I, q. 82, 1: "Sicut intellectus ex necessitate inhaeret primis principiis." See also *De Ver*, q. 1, a. 12; and *Quodlibeta* X, q. 4. a. 1: "Prima principia naturaliter nota, sive sint complexa sive implexa." The word used here, *implexa* (intertwined), is not used by Aquinas in other philosophical works. It is likely that *implexa* might be a typographical error at the time of the composition of the text. Perhaps, as Thomists like S. Brock suggests, Aquinas implies *incomplexa* instead of *implexa* because a similar idea in the passage referred to is portrayed in the following extract of *De Ver*, q. 11, a. 1: "praeexistunt in nobis quaedam scientiarum semina, scilicet primae conceptiones intellectus, quae statim lumine intellectus agentis cognoscuntur per species a sensibilibus abstractas, sive sint complexa, sicut dignitates, sive incomplexa, sicut ratio entis, et unius, et huiusmodi, quae statim intellectus apprehendit." It might also be as people like L. Elders have proposed that Aquinas uses *implexa* to depict the principles as intertwined. (See L. Elders, "The First Principles of Being in the Philosophy of St. Thomas Aquinas," 72). Possibly, Aquinas refers to the principles, which are interconnected in such a way that they are all linked to one or more first principles.

that the meaning of the statement defies immediate clarity and so needs some interpretation and elucidation. Aquinas uses the word 'complex' to denote incorporating diverse parts while jointly merging them.[45] A strong probability of its implication regards principles that are largely formulated in such a way that they contain other propositions. A principle that relates to different types of a phenomenon is also applicable here. As we already accentuated, several of our sample principles are, as it were, interconnected. This is such that they form a unity because, as Aquinas pointed out, in order to have a science the principles must form a unity and the subject matter must be one.[46] The mentioned unity is obtainable when the principles are in the same category of intelligibility and are reducible through a demonstration *ad impossibilia* to the principle of contradiction. Our subsequent grouping of the principles depends largely on their order of precedence from primary through secondary principles.

### *B.1 Thomistic Principles: Identification and Structural Précis*

Stemming from the above, it is incumbent at this point to note that Aquinas uses principles copiously, in a broad sense. Most often he applies the principles in an axiomatic way as if they were generally known without justifying their use. This observation does not pretend to make easy what may apparently be complex, but to give a clue to Aquinas' methodology in the use of the principles. Ordinarily, most of Thomistic readers may still find it difficult to figure out the maxims. The reason might be from Aquinas' routine application of the principles without a lead. We discover that there is an indication to the principles in Aquinas. For those, however, who are already used to determining Thomistic maxims, it is amazing to discover the numerous principles Aquinas employs. Of course, the most part of them are 'secondary' principles, obtained by some reflection and not universally known by everybody, as we already indicated. Aquinas, therefore, is justifiably "the man of the principles" among the schoolmen. Hence, to facilitate the job for Aquinas' readers who are not familiar with this Thomistic methodology and general application of the principles, we suggest some clues to detecting these principles in Aquinas.

Quite often before Aquinas explicates any doctrine and decides on an argument he applies a maxim and, within the definition, there is often found a principle-statement which he uses to justify his stand. Moreover, as a tip to pinpointing (spotting) the principles, we find that Aquinas most often employs and utilises such words as *autem*, *enim*, *sicut* to introduce the principles that he uses

45 See *ST*, II–II, q. 83, a. 9, ad 4; *In III Sent*, d. 25, q.1, a. 2 etc.

46 *In I APst*, lect. 41, n. 11: "Ad hoc autem quod sit una scientia simpliciter utrumque requiritur et unitas subiecti et unitas principiorum."



to validate his claims.[47] Bearing this nuance of Aquinas in mind smooths the progress of reading Aquinas' principles, because most of their implications are depicted in the actual passage wherein they are used.

For a better grasp of the principles in Aquinas, we have classified them into the very first fundamental (universal) "principles known by all" (philosophers and non-philosophers alike), and "the principles known and understood by those in some specific area of speculation." Consequently, our notion of the first Thomistic principles in this discourse is an inclusive one. We nominate the latter group as 'secondary principles' and we hope to examine many of them in this chapter because of the section's descriptive focus. Subsequently, when we mention the principles, except when otherwise specified, we imply both categories. We anticipate and expect that they will help us appreciate more Aquinas' expertise in the principles.

As our attempt in this chapter is for illustration of the import of the principles in Aquinas, we will do so with our various categories of the Thomistic principles. Hence, our endeavour herein is to consider being (*ens*) through the principles and to reconcile it as much as possible with its derivatives. Since there is limited literature on this particular argument, we shall try in our classification and brief analysis to read meaning into, and interpret, Aquinas by putting his arguments parallel to his other writings. We do not intend to examine every category of realistic principles in Aquinas, as that may be enormous. We have, therefore, tried to curtail our inquiry to a few principles, mainly with ontological slant. In order not to overstretch our investigation, we will exclude from our categorisation other essential realistic principles like those relating to the intellect, the will, truth, and creation.

We shall also not discuss the "principle of sufficient reason (PSR)," as it is not part of the Thomistic principles. The PSR is of Leibnizian tendency, and we want to avoid an admixture. Although some renowned Thomists like Reith, O'Donnell, Bearsley and Garrigou-Lagrange,[48] include it in the discourse on the first Thomistic principles, we will resist the temptation and remain strictly with the Thomistic legacy.

47 See L. Elders, "The First Principles of Being in the Philosophy of St. Thomas Aquinas," 94.

48 See H. Reith, *The Metaphysics of St. Thomas Aquinas* (Milwaukee: The Bruce Publishing Company, 1958), 43–44; R. A. O'Donnell, *Hooked on Philosophy: Thomas Aquinas Made Easy*, 4; and P. J. Bearsley, "Another Look at the First Principles of Knowledge," 589–598. It is true that Bearsley appropriately admitted from the outset that Leibniz championed the PSR; he also indirectly attributed it to Aquinas's fifth way, especially in pages 592–593 of the indicated article. R. Garrigou-Lagrange, *Il senso comune* (Brescia: La Scuola Editrice, 1952), 69–78 esp. 72. For Garrigou-Lagrange the PSR can be inferred from Aquinas by reason of the intelligibility in being (*esse*). He cites Aquinas *In Dionysii de Divinis Nominibus*, Cap. 7, lect, 5 to support his claims. For further reading on this, see also C. Fabro, *Partecipazione e causalità secondo S. Tommaso d'Aquino*, 2nd ed. (Roma: Editrice del Verbo Incarnato, 2010), 50ff.

Since principles are primarily ontological, our divisions commence with principles of being (*ens*) and include the principles of the four forms of causality because Aquinas' metaphysics hinges mainly on them. We culminate our list with a few ethical principles, as that will help us in subsequent chapters of our search.

### B.2 *Recurrent Principles in the Works of Thomas Aquinas*

#### B.2.1 *Ontological Principles: Being*

Prior to this section of our discourse, that is, on the classification of the first principles, it is necessary to bear in mind that as intense as these basic postulations are in their most profound form, their explanations lack adequacy. This is to say that the sense of the first principles is never affirmed in a completely explicit way. This is why we can allude to the fact that Aquinas adopts a modest disposition in his various assertions and applications of the first principles because of their ontological quality. We think, also, that in anyone who intends to assert the first principles, a similar attitude is required. We caution that our attempt herein to the ordering of the first Thomistic principles may be lacunose, as Aquinas himself does not speak of these principles correspondent to the exigency of being (*esse*) in a systematic or organised manner.

With the above in view, we articulate Aquinas' appropriate distinction in his commentary on Boethius' *De Trinitate* of two general kinds of principles. According to him, some principles that also serve other principles are complete natures in themselves.[49] Other particular principles are incomplete and mixed in their natures as principles; they are just principles of other things. Aquinas goes further to explicate that for any given genus there are specific common principles whose extension embraces all other principles of that genus. Therefore, all beings as long as they share in being (*ens*) have specific principles that are the principles for every being (*esse*).

Furthermore, Aquinas recognises through most of his writings that, given the variety of the first principles in the 'actuality' of the first principles, most of their likeness can be established *secundum analogiam*.[50] This likeness takes diverse modalities, as we shall see further in our investigation. These varied principles share commonness in one of two ways. First, they may be said to be common in the order of predication in the sense whereby a form can be common to every other form because form is a predication for all. Secondly, their commonness can also be established in the system of causality by way of analogy. Hence, "first ontological principles of being" appropriately envelop all kinds of principles, similar and different, simultaneously.

49 *In De Trin*, q. 5, a. 4: "Sed principiorum duo sunt genera. Quaedam enim sunt quae et sunt in se ipsis quaedam naturae completae et sunt nihilominus principia aliorum."

50 See *De Principiis* Ch. 6.



In view of the abovementioned, before progressing, we note that we cannot exhaust various categories of the Thomistic ontological principles and of epistemology. It is just enough to establish that, for Aquinas, the principles are real and interconnected in the realm of being (*ens*) and epistemology.

##### a. *First Principles of Being as Such*

Drawing from the preceding, we come to the investigation of the first principles of 'being', as such, because 'being' (*ens*) designates any reality. Nothing is, except that it has 'being' (*esse*). Aquinas depicts in the science of 'being *qua* being' (*ens inquantum ens*) the first principles consecutive to being (*ens*) primarily in some affirmations akin to being (*ens*). Accordingly, Aquinas, in line with Aristotle, articulates the most primary of these principles thus: "it is impossible for the same attribute both to belong and not belong to the same subject at the same time."[51] Aquinas explains further that the task of the philosopher in decoding the principles lies in this fundamental "principle of non contradiction" (PNC). Following the Aristotelian paradigm, Aquinas asserts that the PNC is the *firmissimum* and *certissimum* of all the principles and is universally acknowledged by all, known from the natural light of the agent intellect.[52] Through these Thomistic declarative statements, we further comprehend that being (*ens*) and non-being (*non ens*) are contradictory,[53] that to be (*esse*) and not to be (*non esse*) are contradictions,[54] and that "a thing is one, according as it is a being (*ens*)"[55]. Hence, Aquinas confirms that reality is being (*ens*) and one. Subsequently, in the natural reality, Aquinas demonstrates that "things which are opposed in idea (*ratio*) are themselves opposed to each other."[56] This fact is because there cannot be any coherency in division except in oneness and unity. For a thing is being (*ens*) as long as it is unified, since the sense of being is holistic. Aquinas, further, fittingly demonstrates that being (*ens*) is not a genus.[57] The import is that a genus makes the difference. Nonetheless, the genus introduces an insightful element in being (*ens*), that of variety. This is to say that with the genus comes the notion of plurality in being (*ens*). For Aquinas himself observes that "all plurality is a consequence of division."[58] However, this kind of plurality is not a disruption but an enhancement in being. For however great the variety of things that exist, there is also consistency because of fundamental unity in nature. Subsequently, through the genus, we appreciate the multiplicity in the species of

51 *In IV Metaph*, lect. 6, n. 5: "Impossibile eidem simul inesse et non inesse idem."

52 See *In IV Metaph*, lect. 6, n. 4.

53 *In IV Metaph*, lect. 16, n. 8: "Ens et non ens sint contradictoria."

54 *ST*, I–II, q. 64, a. 3, ad 3: "Esse et non esse sunt contradictoria."

55 *ST*, I, q. 76, a. 7: "Sic dicitur aliquid unum, quomodo et ens."

56 *ST*, I, q. 11, a. 2 sc: "Quorum rationes sunt oppositae, ipsa sunt opposita." [*Ratio* added]

57 *In I Sent*. d. 8, q. 4, a. 2, ad 2: "Ens enim non est genus."

58 *ST*, I, q. 30, a. 3: "Omnis pluralitas consequitur aliquam divisionem."

the one being (*ens*). That additionally gives reason to the fact that there can be no multitude without individual distinctions.[59]

Furthermore, Aquinas lets us understand that it is not enough to be aware of being (*ens*), since there is also a gradation in being (*ens*). To facilitate the decoding of the hierarchy in being, there is the Thomistic maxim that "the more simple and the more abstract a thing is, the nobler and higher it is in itself."[60] Accordingly, through this notion we grasp that the most noble in being are the immaterial realities according to their order of superiority. We further see in Aquinas' conception that the fundamental thing in any reality is its act of being (*actus essendi*) which, in most cases, assumes the immaterial form. No wonder Aquinas regards such as the most noble and the highest manner of being (*esse*). The implication is that as Aquinas proposes, "what befits a thing naturally and immovably must be the root and principle of all else appertaining thereto."[61] The reason is that it is the whatness in the nature of a thing with which the thing exists and in which every other thing thrives in that very nature.

From the logical perspective, we come to grips also with the fact that things that are identified with the same thing as in its nature are identified with each other.[62] This is the principle of 'compared identity'. With Aquinas, we make this articulation because it is only natural that anything, which belongs to a thing, remains in it and is identified with other things that appertain therein. This brings us to the appreciation of one of the Thomistic principles, which states, "things which are like one and the same thing are like to each other."[63]

Aquinas further brings us to see in being that nothing, which is not act, can exist. Nature as we know thrives in actuality. Without act, all is potential and non-existent. For this reason, Aquinas validates the maxim that "the first among all acts is being."[64] This is to say that in activity is being (*esse*), as such.

The principle of being is, therefore, enhanced if we see the genuineness of its being, for Aquinas accordingly asserts that it is the principle of being that things, which are pre-eminently true (in the sense of ontological truth), stand out, also, as pre-eminently beings (*ens*).[65] The entire reality then conforms to the principle of being. Accordingly, the authenticity of being (*ens*) exemplifies an eminence of the first principle of being from the fact that, from an elevated nature, things ensue

59 See *SCG*, II, Ch. 44, n. 8: "Multitudo sine diversitate esse non possit."
60 *ST*, I, q. 82, a. 3: "Quanto autem aliquid est simplicius et abstractius, tanto secundum se est nobilius et altius."
61 *ST*, I, q. 82, a. 1: "Quod illud quod naturaliter alicui convenit et immobiliter, sit fundamentum et principium omnium aliorum."
62 *ST*, I, q. 28, a. 3, ad 1: "Quaecumque uni et eidem sunt eadem, sibi invicem sunt eadem."
63 *ST*, I, q. 12, a. 9: "Quaecumque uni et eidem sunt similia, sibi invicem sint similia."
64 *ST*, I, q. 76, a. 6: "Primum autem inter omnes actus est esse."
65 *SCG*, I, Ch. 13, n. 34: "Quae sunt maxime vera, sunt et maxime entia."



in a more intimate way.[66] Such confirms that the being (*esse*) of the part demonstrates the being (*esse*) of the entirety because the part 'is' always on account of the whole.[67] This fact explicates the uniformity, assortment, and completeness in existence even in the presence of the hierarchy as underscored above.

We find further through Aquinas' discourses on the first principles of being and epistemology that being and knowableness are perfected by the extension of being to the smallest realities. The reason is that "the ordering is the more perfect according as it extends to the smallest things."[68] On this grounding, we establish the Thomistic assertion that the same entity can measure no same thing,[69] because it is impossible. Hence, it is in the nature of being that a thing cannot be the measure of that same thing. Consequently, the ontological principles of being coexist and correlate as they serve as measure for each other.

### b. *The First Principles in Substances and Accidents*

Aquinas' commentary on *De Trinitate* of Boethius, on argument for the existence of God, makes us understand that the principles of 'being' are initially determinable from the viewpoint of substances and accidents. The reason is that substance is the articulation of being (*ens*), as such. Aquinas rightly asserts that all accidents are reducible to higher principles of substances.[70]

From the standpoint of natural reality, in his many expositions, Aquinas asserts that the principle of substance is the first a philosopher should decipher, because it is the first instance of the principle of being (*ens*) on which all things depend for their being (*esse*) and through which they are identified. This is why Aquinas, commenting on Aristotle, affirms that "to be one is to be a principle or starting point."[71] Aquinas, along the same line, establishes that principles of substance can be said to be all that exists as subject of entity (*id quod est*) and are distinct from their accidents or their modes (*id quo aliquid est*). This implies that everything that is subjected to entity is one and identical under its varied phenomena, successive or permanent. The grounding is that the substantial principle is readily evident in the principle of identity. Accordingly, examined from this point of view, the concept of substance appears as a simple determination of the first notion of being, that is, considering being explicitly as substantial. Thus, the substantial principle is a simple determination of the principle of identity. And so, the accidents find their reason of being (*esse*) in the substance.[72]

66 *SCG*, IV, Ch. 11, n. 1: "Quanto aliqua natura est altior, tanto id quod ex ea emanat, magis ei est intimum."
67 *SCG*, III, Ch. 17, n. 6: "Esse enim partis est propter esse totius."
68 *SCG*, III, Ch. 77, n. 1: "Tanto perfectior est ordinatio, quanto magis descendit ad minima."
69 *ST*, I, q. 30, a. 2, ad 5: "Idem autem non mensuratur per idem."
70 See *In De Trin*, q. 5, a. 4.
71 *In V Metaph*, lect. 11: "Unum esse, est principium esse."
72 See *In V Metaph*, lect. 10 and 11.

In addition, according to Aquinas, the unity and diversity in *ens commune* is explicable, also, through the principles of substance and accidents. This is seen in Aquinas' identification of a fundamental distinction between that which is *per se* and that which is *per accidens*. Therefore, Aquinas, in line with Aristotle, designates substance as that which is first 'known' because it is the prime indication of being.[73] Normally, natural things are known as they are before that which forms their parts. This further justifies as indicated above that substances are the primary reference of being (*ens*) and being (*esse*) in the prime sense. Aquinas further implies that the first principles can be traced back to a principle of being, which is the substance. Hence, he asserts that for anything to 'be' as such, it is necessary that the thing essentially has being (*esse*). This is to say that being subsists and belongs fundamentally to that which has being (*esse*).[74] Aquinas continues to designate the priority of substantial principle over the accidental one by the principle that substance is always prior to the accident.[75] The reason is that whatever is essential in any reality necessarily takes precedence over that which is accidental.[76] Thus, Aquinas confirms through the preceding principles that the substantial *esse* is a real being, in which, in a way, inheres the accidental *esse*.

Consequently, the fact remains, as Aquinas asserts, that nothing in act is in potentiality when in act as an act.[77] The implication is that substance is in act in regard to the accident that adheres to it. To properly decipher, therefore, the properties original to substance Aquinas makes us understand that quality gives the substance its substantial modality.[78] This implies that as the accident is the quality of substance, it always continues to be a quality and does not supersede the substance in which it adheres.

Moreover, Aquinas confirms part of the first substantial principles in the affirmation that whatever belongs to anything, when considered in itself, can never be separated from that thing. This can be translated as establishing the fact that anything basic or essential to a thing remains essentially that and is inseparable from it. This is unlike an accident that is separable from a particular entity because it is not substantially of the same nature with that being.[79] Besides, we know and express with Aquinas that it is natural that anything that is accidental of a thing is ordered in that substance and follows after it, as it were. Therefore, no being can exist as part without insertion into the whole. Aquinas depicts this in his maxim

73 *In IV Metaph*, lect. 1: "Alia enim dicuntur entia vel esse, quia per se habent esse sicut substantiae, quae principaliter et prius entia dicuntur."
74 *ST*, I, q. 45, a. 4: "Illi enim proprie convenit esse, quod habet esse."
75 *ST*, I, q. 3, a. 6, ad 2: "Substantia sit prior accidentibus."
76 *ST*, I, q. 3, a. 6: "Omne quod est per se, prius est eo quod est per accidens."
77 *ST*, I, q. 77, a. 1: "Nihil enim est in potentia secundum actum, inquantum est actus."
78 *ST*, I–II, q. 49, a. 2: "Proprie enim qualitas importat quendam modum substantiae."
79 *ST*, I, q. 50, a. 5: "Quod enim convenit alicui secundum se, nunquam ab eo separari potest." and *ST*, I, q. 51, a. 1: "Quod enim accidit alicui naturae, non invenitur universaliter in natura illa."



that every part is directed to the whole just as the imperfect is perfected through the perfect.[80] Additionally, Aquinas corroborates that, in natural things (beings), everything, which naturally belongs to another, is mainly and more strongly attuned to that 'other' to which it belongs than to itself.[81]

In the same vein, Aquinas asserts in another passage the principle which states: "that which belongs to a thing by its nature, and not by some other cause, cannot be diminished and deficient therein."[82] This is an affirmation that a natural thing together with anything that forms its part remains unadulterated in its very nature. Again, in another instance, Aquinas establishes that an accident is not of the essence of its subject,[83] implying that the subject 'is' and can exist irrespective of its accidents. This entails the understanding that the essential is what actually matters. Hence, it follows that an accident cannot exist without the principle of substance of which the accident is considered. Consequently, the statement demonstrates that anything in actuality, which is by another, is reducible to that which is by itself, because the prior entity exists by itself and contains the accident.[84]

Thereon, from the foregoing, we discover, as Aquinas suggests, that the substance is the foundation for the existence of the accidents. Without the subject (substance), accidents are null and void for they cannot have being (*esse*), as such, and are devoid of real entity. Thus, the principles of substances and accidents necessarily co-exist, just as matter and form combine to form the substantial principle in reality.[85]

### c. *Operations, Actions*

Aquinas articulates part of the ontological principles through operations and agencies in being. The nature of reality is such that "every agent acts for an end."[86] This principle is parallel to the Thomistic maxim that "an agent does not move except out of intention for an end."[87] This is to say that nothing naturally

80 *ST*, II–II, q. 64, a. 2: "Omnis autem pars ordinatur ad totum ut imperfectum ad perfectum."
81 *ST*, I, q. 60, a. 5: "Unumquodque autem in rebus naturalibus, quod secundum naturam hoc ipsum quod est, alterius est, principalius et magis inclinatur in id cuius est, quam in seipsum."
82 *SCG*, II, Ch. 15, n. 3: "Quod alicui convenit ex sua natura, non ex alia causa, minoratum in eo et deficiens esse non potest."
83 *SCG*, I, Ch. 23, n. 5: "Accidens enim de se natum est inesse et non inesse."
84 *SCG*, II, Ch. 47, n. 3: "Quod est per aliud, reducitur in id quod est per se."
85 We note that this citation is confirmatory of the final argument and not a principle. *De ente et essentia*, Ch. 5: "Et hoc ideo est, quia non habent per se esse, absolutum a subiecto, sed sicut ex forma et materia relinquitur esse substantiale, quando componuntur, ita ex accidente et subiecto relinquitur esse accidentale, quando accidens subiecto advenit."
86 *ST*, I–II, q. 94, a. 2: "Omne enim agens agit propter finem,." See also *ST*, I, q. 44, a. 4; *ST*, I–II, q. 28, a. 6; *SCG*, III, Ch. 2; *ST*, I–II, q. 6, a. 1 etc.
87 *ST*, I–II, q. 1, a. 2: "Agens autem non movet nisi ex intentione finis."

is mobilised except with an end in view. Aquinas further corroborates that the natural end of every act is necessarily for the good when he says that "every agent acts for a good."[88] This portrays that reality is intrinsically good. The implication is that if everything follows its rightful cause, the attainable end is invariably the good. No wonder Aquinas also lets us comprehend that a natural agent does not intend privation,[89] because privation is negative and it is not an integral part of being (*ens*). Being, as a result, is self-communicative through act since self-giving is part of its actuality.

Hence, Aquinas demonstrates that it is natural for all acts to communicate themselves to the utmost through the maxim that it is the nature of every act to communicate itself as much as possible.[90] The reason is that "to act is nothing else than to communicate as far as possible that whereby the agent is in act."[91] In light of this communication is the appropriateness of the principle which proposes that "every agent produces its like."[92] In natural reality, every nature is propagated through its like by the action of its form. Thus, we establish that the element by which the agent is in act is its form, as shown in the Thomistic maxim that the natural agent acts by means of the form, which constitutes its whatness.[93] This further conveys the idea that the essential nature of the agent is in 'activity'. Thus Aquinas, using another principle, fittingly asserts that an agent does not fail in its action except with some impediment.[94] If that is the case, the natural effect of every agent is a substantiation of positive enhancement in being. Moreover, Aquinas submits that every natural thing is ordained and disposed to its well-adapted effects.[95]

We cannot, therefore, overrate the crucial nature of the agent for its productive character. Accordingly, Aquinas additionally substantiates that whatever exceeds the limits of a nature, cannot be acquired by the very nature apart from the agency of another. Hence, the nature of a being (*esse*) is aligned to another being (*esse*) that confers its nature to it.[96] And so, we can also affirm that the same applies to the nature of any knowledgeable reality which is acquired through another. Subsequently, reality cannot progress without the elements of operation and action.

88 *SCG*, III, Ch. 3: "Omne agens agit propter bonum."
89 *ST*, I, q. 19, a. 9: "Non enim agens naturale intendit privationem."
90 *De Pot*, q. 2, a. 1: "Natura cuiuslibet actus est, quod seipsum communicet quantum possibile est."
91 *De Pot*, q. 2, a. 1: "Agere vero nihil aliud est quam communicare illud per quod agens est actu, secundum quod est possibile."
92 *SCG*, II, Ch. 98, n. 4: "Unumquodque agens agit sibi simile." See also *ST*, I, q. 25, a. 3 etc.
93 *ST*, I, q. 47, a. 1, ad 1: "Agens per naturam agit per formam per quam est."
94 *ST*, I, q. 49, a. 1: "… nec agens deficit in sua actione nisi propter aliquod impedimentum."
95 *De Ver*, q. 22, a. 1: "Omnes res naturales sunt ordinatae et dispositae ad suos effectus convenientes."
96 *SCG*, III, Ch. 52, n. 6: "Quidquid excedit limites alicuius naturae, non potest sibi advenire nisi per actionem alterius."



### B.2.2 *Ontological Principles: Causality*

Stemming from our previous survey on the principles of being, we embark on causality. Before delving into the first principles of causality, we indicate that principles do not necessarily imply causality. Nonetheless, we can justifiably affirm that causality is subsumable in the theory of the first principles because the latter embraces the former and can conveniently apply to parallels. On the other hand, in causality there is always a presupposition of a difference, dependence, and a distance between the one and the other. This is ascertainable from Aquinas' treatises, one of which we represent in the following:

> 'Principle' is a wider term than 'cause'; as 'cause' is more common than 'element'. For the first term of a thing, as also the first part, is called the principle, but not the cause. Now the wider a term is, the more suitable it is to use as regards God …, because the more special terms are, the more they determine the mode adapted to the creature. Hence this term 'cause' seems to mean diversity of substance, and dependence of one from another; which is not implied in the word 'principle'. For in all kinds of causes there is always to be found between the cause and the effect a distance of perfection or of power: whereas we use the term 'principle' even in things which have no such difference, but have only a certain order to each other.[97]

From the above Thomistic citation, we discover that causality is like a narrowing down of the argument. Hence, it is obvious that causal principles are more specific than the wide-ranging principles of being. With the above highlight in mind, we commence with our inquiry on the category of ontological causal principles.

#### a. *Potency, Act*

Arguing on first causal principles, and while portraying the misconception of some ancient philosophers before Aristotle, Aquinas accurately corroborates that the 'first material principles' are most imperfect in their mode of being as principles. Since their nature is material, they are caused and cannot be perfected in

97 *ST*, I, q. 33, a. 1, ad 1: "Principium communius est quam causa, sicut causa communius quam elementum, primus enim terminus, vel etiam prima pars rei dicitur principium, sed non causa. Quanto autem aliquod nomen est communius, tanto convenientius assumitur in divinis, … , quia nomina, quanto magis specialia sunt, tanto magis determinant modum convenientem creaturae. Unde hoc nomen causa videtur importare diversitatem substantiae, et dependentiam alicuius ab altero; quam non importat nomen principii. In omnibus enim causae generibus, semper invenitur distantia inter causam et id cuius est causa, secundum aliquam perfectionem aut virtutem. Sed nomine principii utimur etiam in his quae nullam huiusmodi differentiam habent, sed solum secundum quendam ordinem." See also *In V Metaph*, lect. 1, n. 2 (749–762).

that modality. They have matter as their source of being and for the reason that nothing material is perfect they are short of excellence. They are subsequently prone to potentiality and are deficient in perfect activity.[98] Hence, their being is in process, and we know as confirmed already from Aquinas that anything potential lacks complete perfection. This is because of its portrait in matter, which is changeable.[99] Nothing excellent can be interchangeable as it has the fullness of everything deficient in other realities that proceed from it. This can be established from the fact that nothing in potency becomes act, except through a thing in actuality. Hence, Aquinas' maxim is that "nothing can be reduced from potentiality to actuality, except by something in a state of actuality."[100] It follows that, for any material principle, an actual, that is an agent principle, exists, as act proportions that to which it is an act.[101] Further, in another passage Aquinas corroborates, "as potency is receptive of act, it must be proportionate to act."[102] Thus, there cannot be perfection in potency except through the competent agent. For this efficient cause to be a perfect act as well, it must have maximum activity of its own, because the first formal principle remains a universal 'being' and 'truth'.[103] This accentuates the reason previously certified that nothing confers on another anything it lacks. Although, in principle, potency and act divide being (*ens*) and every kind of being,[104] the fullness of being is an act par excellence.

In every natural first principle, therefore, there is always an element of act and potency because reality, as it is, is composite. The composition is such that the unity is interwoven and inseparable because, as Aquinas upholds, any potency separated from act is imperfect.[105] Likewise, it cannot be otherwise if reality is fundamentally composite, since in every composite thing there is act and potentiality.[106]

In view of the above, we continue in our investigation of the potential and actual principles. Aquinas further allows us to see that nothing potential can cause anything in the perfect sense because another actuality causes it. This is why, in the realm of knowledge, what we first come to know is the act in the sense of an actual being. Nonetheless, everything in our knowledge has its origin through

98 *ST*, I, q. 4, a. 1: "Materia, inquantum huiusmodi, est in potentia."
99 *ST*, I, q. 66, a. 2 sc: "Quaecumque conveniunt in materia, sunt transmutabilia."
100 *ST*, I, q. 2, a. 3: "De potentia autem non potest aliquid reduci in actum, nisi per aliquod ens in actu."
101 *ST*, I, q. 12, a. 3: "Actus autem proportionatur ei cuius est actus." See also *ST*, I, q. 103, a. 5, ad 2; and *De Spiritualibus*, prooem, a. 11.
102 *ST*, I, q. 75, a. 5, ad 1: "Potentia autem cum sit receptiva actus oportet quod actui proportionetur."
103 *ST*, I–II, q. 9, a. 1: "Primum autem principium formale est ens et verum universale."
104 *ST*, I, q. 77, a.1: "Potentia et actus dividant ens et quodlibet genus entis." See also *De Spiritualibus*, prooem, a. 1.
105 *De Pot*, q. 1, a. 1, ag 8: "Omnis potentia ab actu separata est imperfecta."
106 *SCG*, I, Ch. 18, n. 1: "In omni composito oportet esse actum et potentiam." See also *ST*, I, q. 3, a. 7.



beings in motion (that which we already highlighted as composite above). Furthermore, justifiably inferring from Aquinas, act on its own is definable only through instances. This is because, in the inception of any knowledge, we are unable to assume something prior to act, as being causes all knowledge in actuality.[107] The intrinsic nature witnessed here of the union of the principle in potency necessitates the action of another pure act in causality.

Moreover, Aquinas lets us appreciate that everything is an active being according to its form,[108] and nature cannot but produce effect in act from being in potency.[109] We corroborate that the idea of the existence of the first subsequent principles (effects) is only in the intelligibility of the priority of the primal, active, causal principle. There is, then, an inseparable and consistent intimacy drawn from the idea of the procession existent in the act of the causal first principle. Except in the prime first principle, the phenomenon holds for all first principles, because every potential thing in reality receives its denomination from its form, which is the act.[110] To demonstrate this necessary harmony, Aquinas emphasises that no potency is found in passivity in natural things, which cannot be reduced to act through some active natural power.[111] Thus Aquinas, in another passage, delineates: "No act is found to be limited except by a potency that is receptive of the act; thus we observe that forms are limited in accordance with the potency of matter."[112] Likewise, in another place, he proposes:

> Every act inherent to something else receives its limitation from that in which it is: since that which is in another is in it according to the mode of the recipient. Wherefore an act that exists in no subject has no limitations.[113]

Additionally, Aquinas makes us realise that several things cannot become one simply, unless there is something actual there and another aspect that is potential.[114] Accordingly, Aquinas accurately submits, "it is not possible that the same thing should be at once in actuality and potentiality in the same respect, but only

107 See H. Reith, *The Metaphysics of St. Thomas Aquinas*, 102–105.
108 *ST*, I, q. 50, a. 5: "Unumquodque enim est ens actu secundum quod habet formam."
109 *ST*, I, q. 66, a. 1, ad 2: "Natura producit effectum in actu de ente in potentia."
110 *ST*, I, q. 13, a. 11: "Unumquodque enim denominatur a sua forma."
111 *SCG*, III, Ch. 156, n. 7: "Nulla potentia passiva invenitur in rerum natura quae non possit reduci in actum per aliquam potentiam activam naturalem."
112 *Comp. Th*, I, Ch. 18: "Nullus enim actus invenitur finiri nisi per potentiam, quae est vis receptiva: invenimus enim formas limitari secundum potentiam materiae."
113 *SCG*, I, Ch. 43, n. 5: "Omnis actus alteri inhaerens terminationem recipit ex eo in quo est: quia quod est in altero, est in eo per modum recipientis. Actus igitur in nullo existens nullo terminatur."
114 *SCG*, I, Ch. 18, n. 1: "Non enim plura possunt simpliciter unum fieri nisi aliquid sit ibi actus, et aliud potentia."

in different respects."[115] For this reason, potency is in every natural thing in different respects. Reality, therefore, as we are aware, naturally follows the Thomistic principle that potency is for the sake of the activity for its fulfilment.[116] However, there is always an apex in which every composition is simplified and where all potentialities terminate, that is, the perfect act. And so, every potential first principle is finally reduced in the primal uncaused simple act. Hence, we cannot conveniently discuss the first principles without rising to the summit from which the potencies are reduced.

### b. *Matter, Form*

In view of the foregoing, let us examine another existential pair (blend), matter/form. We note immediately that Aquinas makes us apprehend that, as the main ingredient in the nature of matter is material, its mode of causality is also potential. This implies that when the source of the causal influence on an object is material, that object remains inactive or passive. Since matter has potency, and potency, in turn, connotes limitation because it is in the process of actualisation, it lacks the holistic efficiency of a perfect principle.[117]

Moreover, Aquinas explains that the perfection and goodness of any composition is by its vital part, the 'form'. Thus, he says "everything composed of matter and form owes its perfection and goodness to its form."[118] Complication, as we are aware, denotes a sense of potentiality and rules out excellence. Consequently, Aquinas further argues that, "the material principle, ... cannot be absolutely primal."[119] The implication is that whatever has matter is in process. A seed, for instance, cannot be of its own without its parent generator because it is an offshoot of something already actual. Likewise, there cannot be material things without the actual cause in which they all can be conveniently traced to perfect activity. No wonder in one of his treatises, Aquinas delineates two ways of knowing the first principles in created things, the potential and the actual. Potentiality of the material things disappears in this one perfect act through the form, since constantly previous to anything that is potential there is something actual.

Furthermore, a potential being can only be mobilised into action by some active being. The reason is that nothing thrives without its roots because everything develops from its very origin. In addition, since matter is a principle of movement, it cannot, therefore, be a simple principle. Moreover, Aquinas succinctly states that, in natural things, matter and form necessarily co-exist because the

115 *ST*, I, q. 2, a. 3: "Non autem est possibile ut idem sit simul in actu et potentia secundum idem."

116 *ST*, I–II, q. 2, a. 7: "Potentia sit propter actum, sicut propter complementum."

117 *ST*, I, q. 4, a. 1: "Primum autem principium materiale imperfectissimum est."

118 *ST*, I, q. 3, a. 2: "Omne compositum ex materia et forma est perfectum et bonum per suam formam."

119 *ST*, I, q. 4, a. 1, ad 2: "Principium materiale ... non potest esse simpliciter primum."



former is made real by the latter. Hence, we have the Thomistic principle: "the species of anything is derived from its form"[120] because the function of the form is to vivify. This is akin to the Thomistic principle that contraction of the form always comes from the matter.[121] Subsequently, Aquinas allows us to perceive the reality that matter is for the sake of the form, and not the other way around.[122] This depicts a permanent subordination and dependence on the part of matter. Therefore, matter intrinsically remains the underlying potency always one and inseparable with the act.

### c. *Efficiency*

Efficient cause as we gathered from the Aristotelian legacy through Aquinas is like an agent principle. It is a principle that induces movement in the other. Its relatedness to all is such that we find the effect of the efficient cause in most of the other causal principles in order to get to their real end. This is because, as Aquinas proposes, "every effect depends upon its cause."[123] And so, the motion of the efficient causal principle is in the production of action as it is discernible from the Thomistic paradigms herein elaborated. The efficient cause as a principle of movement is not necessarily the end in view. The fact that it stimulates motion does not elevate efficiency beyond its capacity in the hierarchy of causes. The reason is that a principle of movement may be first in a genus and not in simplicity. This is justifiably depicted in the following Thomistic maxim: "it must be observed that a principle of movement may happen to be first in a genus, but not first simply."[124]

However, Aquinas shows the importance of the efficient cause in its capacity to move all others, since the agent makes the material what it is. This is because, as Aquinas strongly suggests, it is another force that mobilises something in motion into action.[125] The meaning of its efficiency as a causal principle, as it were, is drawn from this Thomistic maxim.

Additionally, the precedent validates Aquinas' principle, which submits that things that are made out of matter are in the potentiality of passive matter; while those which are made through the agent necessarily belong to the active power

120 *ST*, I, q. 76, a. 1: "Sortitur autem unumquodque speciem per propriam formam." See also *De Anima*, prooem, a. 1 SC. See also J. F. Wippel, *The Metaphysical Thought of Thomas Aquinas: from Finite Being to Uncreated Being*, 297–298.

121 *ST*, I, q. 14, a. 1: "Coarctatio autem formae est per materiam." See also H. Reith, *An Introduction to Philosophical Psychology*, 288. We append here that 'prime matter' is excluded, as it is only a possible principle, which has no real existence.

122 *ST*, I, q. 47, a. 1: "Materia est propter formam, et non e converso."

123 *ST*, I, q. 2, a. 2: "Effectus dependeant a causa." See also all *ST*, I, q. 2, a. 2.

124 *ST*, I–II, q. 6, a. 1, ad 1: "Contingit aliquod principium motus esse primum in genere quod tamen non est primum simpliciter."

125 *ST*, I, q. 2, a. 3: "Omne autem quod movetur, ab alio movetur." See also *SCG*, I, Ch. 13, n. 3.

of the agent.[126] Thus, nothing moved can be the optimum of the first principles, since movement suggests a thing in the process of becoming. Aquinas delineates, "active power is the principle of acting upon something else, whereas passive power is the principle of being acted upon by something else."[127] Nonetheless, we perceive that both the mobiliser and the mobilised in natural things make the same movement, which is the process of becoming. We think it is worthwhile to note that the imperfection represented in such movement is inefficiency in some respect. Moreover, we are cognisant that whatever is deficient in a thing yields no fruit of efficiency. Nothing, then, of itself, is reducible from potency into act[128] except through the movement of its act. This validates the natural first principles; whatever is accidental must be traced to something *per se*[129] to be mobilised accordingly. Consequently, while we concur that the matter is the accidental element and the form, the *per se*, we also establish with Aquinas that because of the *per se*, no act is found reduced except through potency.[130] This is to say that the efficient cause only acts on the basic assumption of the potency, which is concomitantly the power of the efficient cause. This is provable because potency is receptive in existing condition. We, thus, re-establish the intricate unity underscored above.

In view of the preceding argument, Aquinas further asserts, "There is no case known (neither is it, indeed, possible) in which a thing is found to be the efficient cause of itself."[131] The implication is depicted in the fact that "the efficient cause is not identical numerically with the form of the thing caused."[132] The efficient cause, then, is like a life-inducing force, usually *ad extra*. This is because anything that may assume its own efficiency would mean priority to itself, which is impossible in the existent reality. Hence, Aquinas confirms the reason for, and the indispensable character of, the efficient principle for every contingent being (*esse*). We see this in the Thomistic maxim that "no body moves unless it be put in motion."[133] Aquinas allows us to perceive further that "the effect pre-exists virtually in the efficient cause."[134] Therefore, without the principle of efficiency, nothing in reality is effective. No wonder Aquinas corroborates, in another passage, that "active power is the principle of acting upon something else."[135]

126 *SCG*, II, Ch. 45, n. 3: "Quae fiunt ex materia sunt in potentia materiae passiva, ita quae fiunt ab agente oportet esse in potentia activa agentis."
127 *ST*, I, q. 25, a. 1: "Potentia activa est principium agendi in aliud, potentia vero passiva est principium patiendi ab alio."
128 *Comp. Th*, I, Ch. 7: "Nihil enim se ipsum educit de potentia in actum."
129 *SCG*, III, Ch. 107, n. 3: "Omne autem quod est per accidens, oportet reduci ad id quod est per se." See also *SCG*, III, Ch. 11, n. 5.
130 *Comp. Th*, I, Ch. 18: "Nullus enim actus invenitur finiri nisi per potentiam."
131 *ST*, I, q. 2, a. 3: "... nec est possibile, quod aliquid sit causa efficiens sui ipsius."
132 *ST*, I, q. 3, a. 8: "Causa autem efficiens cum forma rei factae non incidit in idem numero."
133 *ST*, I, q. 3, a. 1: "Nullum corpus movet non motum." [Trans mine].
134 *ST*, I, q. 4, a. 2: "Effectus praeexistit virtute in causa agente."
135 *ST*, I, q. 25, a. 1: "Potentia activa est principium agendi in aliud."



Aquinas, as a result, authenticates the principle of efficiency to be the principle of action or motion. Subsequently, reality is confirmed to be in motion and is dependent on this motivator, the efficient principle. Hence, this culminates in the existential fact identifiable in the Thomistic maxim that "the second only moves by virtue of the first."[136] And so, everything moves because of the first uncaused efficient principle. This causal principle of efficiency moves every being (*esse*) according to its own appropriate capacity. None, as we already pointed out, can surpass its proper potency for, as Aquinas asserts, no act exceeds the proportion of its active principle.[137] Consequently, Aquinas establishes, like and beyond Aristotle, a holistic progressive movement in 'being' through the efficient principle of causality.

### d. *Final Cause*

Stemming from the previous discourse on the efficient principle, the necessity for an end of all realistic movements is easily perceived. Although the efficient causal principle may also be the end in view, it is not always implicit. The Aristotelian and Thomistic final causal principle demonstrates the end of all movements in being. The import is that the final causal principle is the *terminus ad quem*. Thus, the final cause is that which Aquinas designates as the ultimate end, that is, the proper intention of the principal agent in every effect.[138] In the same vein, Aquinas makes us apprehend that it is actually the final cause which is determinant of all movements and changes in the structural reality and in every being (*esse*). Aquinas, thereby, confirms the maxim that "nature does not fail in what is necessary."[139] The necessary end decides the fate of the subsequent. Accordingly, "the end is the rule of whatever is ordained to the end."[140]

Moreover, Aquinas, in another passage, asserts that in nature "every cause must direct its effect to its end."[141] This validates the absolute necessity of the final causal principle as portrayed through the Thomistic maxim that it is impossible to continue indefinitely in the matter of ends.[142] So, one end justifies the other means. These means are what we already ascertained as every reality in movement. This gives reason for another Thomistic dictum that "the end is nobler

136 *ST*, I, q. 81, a. 3: "Secundum movens non movet nisi virtute primi moventis." See also *ST*, I–II, q. 17, a. 1.
137 *ST*, I–II, q. 109, a. 5: "Nullus autem actus excedit proportionem principii activi."
138 *ST*, I, q. 15, a. 2: "In quolibet effectu illud quod est ultimus finis, proprie est intentum a principali agente."
139 *ST*, I, q. 118, a. 3: "Natura non deficit in necessariis." See also *SCG*, III, Ch. 129, n. 5.
140 *ST*, I–II, q. 1, a. 1 prooem.: "Ex fine enim oportet accipere rationes eorum quae ordinantur ad finem."
141 *ST*, I–II, q. 109, a. 6: "Omnis causa convertat suos effectus ad suum finem."
142 *ST*, I–II, q. 1, a. 4: "Impossibile est in finibus procedere in infinitum."

than the means to the end."[143] The grounding is that, ultimately, every aspiration is accomplished because the end is short of nothing. Consequently, Aquinas confirms that every reality is only noble inasmuch as it is one with the end, which is the principle of the other three causes (material, formal, and efficient). Thus, we affirm with Aquinas, "the end corresponds to the principle."[144] In addition, Aquinas fittingly suggests, "Every creature intends to acquire its own perfection."[145] This can be translated as a confirmation of the foregoing: that every creature seeks fulfilment. And so, excellence is only accessible as already established in and through the end.

Furthermore, Aquinas delineates the role of the final causal principle in saying that "nature tends to one thing only."[146] This implies that there is only one end in view for every reality. In the same line, Aquinas proposes, "Nothing tends to a disproportionate end."[147] Aquinas corroborates that "whatever is for an end should be proportionate to that end."[148] The foregoing principle alludes to the fact, as highlighted above, that the proportional end of anything is the final cause of all the movements of that reality. Accordingly, Aquinas states that, "whatever is in motion towards an end, has a natural desire to be established and at rest therein."[149] No wonder Aquinas asserts "that to which a man is chosen has the aspect (*ratio*) of an end."[150] This is the ground for all the foregoing premises, that is, the end for man is interpreted as that for which he was chosen. Besides, this Thomistic principle is a justification that the end is the first of the four classical causes. Hence, Aquinas demonstrates that there is coherency in being, that being, in turn, is for an end, and that the end of all being is the ultimate and the good.

Aquinas decisively depicts the above in the proposition that "we observe that in nature things happen always or nearly always for the best; which would not be the case unless some sort of providence directed nature."[151] Subsequently, he confirms that God is the ultimate final causal principle that providentially orders everything in nature. God, the intelligent being, therefore, directs everything to its end.[152]

143 *ST*, I, q. 50, a. 3, ad 3: "Finis nobilior est his quae sunt ad finem."
144 *ST*, I–II, q. 2, a. 5, ad 3: "Finis respondet principio;" [Trans mine] See also *ST*, II–II, q. 180, a. 7, ad 1.
145 *ST*, I, q. 44, a. 4: "Unaquaeque creatura intendit consequi suam perfectionem."
146 *ST*, I–II, q. 1, a. 5: "Natura non tendit nisi ad unum."
147 *ST*, I–II, q. 25, a. 2: "Nihil enim tendit in finem non proportionatum."
148 *ST*, I–II, q. 96, a. 1: "Unumquodque quod est propter finem, necesse est quod sit fini proportionatum."
149 *SCG*, III, Ch. 48, n. 3: "Omne quod movetur in finem, desiderat naturaliter stabiliri et quiescere in illo."
150 *ST*, I, q. 24, a. 2: "Id ad quod eligitur aliquis, habet rationem finis;" (*ratio* added).
151 *ST*, I, q. 103, a. 1: "Videmus enim in rebus naturalibus provenire quod melius est, aut semper aut in pluribus, quod non contingeret, nisi per aliquam providentiam res naturales dirigerentur."
152 *ST*, I, q. 2, a. 3: "Ea autem quae non habent cognitionem, non tendunt in finem nisi directa ab aliquo cognoscente et intelligente."



### B.2.3 *First Principles Involving Participation*

Launching from our previous discourse, we come to investigate the first principles of participation in Aquinas. We also give prominence to this discourse in our inquiry because of its importance in Thomistic metaphysics. The notion of participation is the axis of Aquinas' metaphysics that bears the intensive concept of being (*esse*). In this doctrine, Aquinas demonstrates an optimal originality distant and different from any of his predecessors. The notion of participation has a transcendental import in Aquinas and leads us invariably to God, the reason of every being (*esse*) and existence. Through history Thomists have grappled with Aquinas' notion of participation; in effect, it has received much criticism from Thomists and non-Thomists alike. Nonetheless, it remains a central theme in Aquinas' metaphysical methodology of *compositio et resolutio*. Fabro, one of the most outstanding advocates of the Thomistic doctrine of participation, succinctly brings out the flaws of some authors who simply levelled this doctrine as a Platonic or an Augustinian reproduction. In his work, *La nozione metafisica di partecipazione*, Fabro uses the submission of people like Baeumker and Lang to demonstrate the profound errors of such proposals.[153] According to Fabro, the Thomistic notion of participation is not a mere importation as some scholars suspect.

Fabro further shows that, though the Thomistic notion of participation has an Aristotelian tendency and a touch of Platonism and Augustine, it is unique and innovative for its dependence on the supreme principle.[154]

Consequently, the principles of participation express and explain the causal or creaturely dependence of being on God. We can then justifiably suggest that Aquinas' metaphysics is metaphysics of participation.[155] Let us now have a cursory glance at some of the principles pertaining to participation.

Just as the principles connected to the first causal principles are extensive, so too is there a variety of the first Thomistic principles concerning participation. Although, for Aquinas, reality is holistic, he also has the belief that being is participatory. This Thomistic conviction brings out the true picture of intelligible reality. Hence, in an attempt to represent this notion of being Aquinas uses many principles relevant to participation to justify his claims. In the following category, we wish to use some of Aquinas' principles to portray the participatory image of reality.

As we have gathered from preceding discourses, we talk about principles in different senses. In this case, when we use 'more' or 'less' as Aquinas illustrated, it can be used to depict quality in something. 'More' or 'less' can also be employed for predication in accordance with its resemblance in different ways to something

153 See C. Fabro, *La nozione metafisica di partecipazione* (Roma: Editrice del Verbo Incarnato, 2005), 14–15.
154 See C. Fabro, *La nozione metafisica di partecipazione*, 342–347.
155 See B. Mondin, *La metafisica di S. Tommaso d'Aquino e i suoi interpreti*, 244–250.

in the superlative sense, which is 'maximum'.[156] This implies that they introduce a qualitative and comparative idea either in an argument or in reality itself. For this reason, the fact that there is always something higher in gradation presupposes the existence of an optimal principle. In the aforementioned optimum principle lies the summit of whatever quality can be predicated. This 'maximum' is not comparable with the smaller ones, but is like an exemplar.

We see through the maximum as Aquinas proposes, the principle that "the essential good is prior to the participated good."[157] The participated good herein carries a connotation of lack of ownership. Consequently, the prior specifically assumes the role of the giver; it justifies the fact that nothing has or can endow existence except that which is fully being. The basis of this verity is: "that which has being but is not being, is an entity by participation"[158] because everything it has is granted to it. Additionally, Aquinas enhances this view by another principle, which proffers: "from the fact that a thing is a being by participation, it follows that it is caused by another."[159] This is another way of upholding that all finite beings are *ens per participationem* because all are caused by a superabundant being. The reason is that there is none that has being in its fullness unless the one who merits the qualification, 'being'. Thus, to this 'existence' in essence, all others are participatory. We assent to this fact by an incisive maxim of Aquinas that states: "whatever is found in anything by participation must be caused in it by that to which it belongs essentially."[160] Since every finite being essentially belongs to the fullness of being, everything found in each being is through the 'essential being' (God). Hence, to each is bestowed being according to its capacity and in its own mode. When we, therefore, grapple with the intelligibility of every being in reality, we realise that all finite things share in 'being'. Subsequently, only one extraordinary *ens* is left untainted by the act of sharing. This is the plenitude of 'being' (God) of which every reality partakes. We refer to the one being capable of this fullness as the Thomistic 'maximum'. Only this 'being' can justify all beings in 'its' own right as the summit of all existence. The substratum of this rationale is that this 'being' has the right to reclaim everything in existence at will.

To explicate more on the characteristic of this one super-eminent being, Aquinas also submits the principle that always what exists of itself is prior to

156 *ST*, I, q. 2, a. 3: "Magis et minus dicuntur … secundum quod appropinquant diversimode ad aliquid quod maxime est."
157 *ST*, I, q. 3, a. 2: "Bonum per essentiam, prius est bono per participationem."
158 *ST*, I, q. 3, a. 4: "Quod habet esse et non est esse, est ens per participationem."
159 *ST*, I, q. 44, a. 1, ad 1: "Ex hoc quod aliquid per participationem est ens, sequitur quod sit causatum ab alio."
160 *ST*, I, q. 44, a. 1: "Si enim aliquid invenitur in aliquo per participationem, necesse est quod causetur in ipso ab eo cui essentialiter convenit."



that which exists through another.[161] The idea expressed in this Thomistic view (principle) embraces the whole of reality when closely related to individual instances. No reality, therefore, 'is' without participating in some way in another. We affirm that this Thomistic conception is laudable for its veracity as it carries the concept of being in its entirety. This is to say that without the concept of participation, the ultimate being would be unapproachable.

Moreover, the notion of being is interesting because it bears with it a communal concept. We understand further from the above principle that the individual existents are lacking without the incessant sharing in the being of the superlative, the maximum being. This is because, according to one of Aquinas' principles, "no being is called evil by participation, but by privation of participation."[162] The argument is easy to follow since nothing that participates in the optimal good can in effect be evil except when there is a lack. When evil then flows into the finite reality, it only enunciates the privation of complete participation and communion with the one optimal being. However, for any being to remain in existence it must be part of the whole; that is to say, part of being. In view of the privation, evil can simply hamper something from the specific being from full realisation of potentiality. There is then no solitary existence in reality. It follows then that for anything to 'be', it must be submissive to the natural principle of participation. Furthermore, in like manner, Aquinas explicates that something is perfect as long as it attains its principle.[163] As illustrated above, the entire reality is evidently portrayed here because, just as in an architectural piece whose beauty is in the mind of the architect, so also with the perfection of anything. When the process, otherwise, does not ensue by a lack of continuity, the opposite, which is privation, invariably is obtainable. Hence, full participation and identification in a being's principle not only removes privation but adds the plenitude of a particular kind to specific *species*. No wonder Aquinas in another instance asserts that the "First Act is the universal principle of all acts".[164] The reason is that as everything is perfected by its principle, the first act as the universal principle perfects all acts in reality by munificently sharing its plenitude.[165]

161 *ST*, I, q. 20, a. 1: "Semper enim quod est per se, prius est eo quod est per aliud." See also *SCG*, I, Ch. 13, n. 21 and *SCG*, II, Ch. 70, n. 2.
162 *ST*, I, q. 49, a. 3, ad 4: "Nullum ens dicitur malum per participationem, sed per privationem participationis."
163 *ST*, I, q. 12, a. 1: "Intantum enim unumquodque perfectum est, inquantum ad suum principium attingit."
164 *ST*, I, q. 75, a. 5, ad 1: "Primus actus est universale principium omnium actuum."
165 *ST*, I–II, q. 109, a. 1: "Non solum autem a Deo est omnis motio sicut a primo movente; sed etiam ab ipso est omnis formalis perfectio sicut a primo actu." and *ST*, I, q. 75, a. 5, ad 1: "Actus vero recepti, qui procedunt a primo actu infinito et sunt quaedam participationes eius, sunt diversi." See also C. Fabro, *Partecipazione e causalità secondo S. Tommaso d'Aquino*, 475–483.

In line with the foregoing, Aquinas continues to buttress the nature of participatory principles in reality by the use of the analogy that "the more universal is naturally prior to what is less so."[166] Obviously, the above-mentioned principle is self-explanatory as 'universal in being' presupposes a subsuming in some way of the minor. The nature of any reality, therefore, is such that the notion of the universal is always an inclusive phenomenon. To this principle can be aligned another Thomistic principle which states: "that which is such by its essence, is the proper cause of that which is such by participation."[167] We concur from our perception that reality is so ordered. Being in the universal sense or in the individual circumstances portrays this simple fact. There is no existent thing that cannot be traced to its cause and the proper essence in which it participates. A similar Thomistic principle emphasises that any reality, which is said to be essentially this or that, is the cause of all that are in the same mode through participation.[168] No wonder, as Aquinas precisely puts it, there must be something first in every genus.[169] Consequently, from this 'first' as through a source or fountain flow all others that share in the *species*. The genus of a thing, therefore, describes its proper nature. Hence, in reality, generation can also comfortably align (is analogous) to the principles of participation; for in generation is the origin of each proper principle. On these grounds, we associate Aquinas' maxim that "all in one genus agree in the quiddity or essence of the genus."[170] The agreement brings forth again the idea already underscored about the communal notion in participation. Since the quiddity of any thing explains its 'whatness', and the whatness, in turn, is nothing but the essence of its 'beingness', it stands to reason that quiddity is the crucial element in any reality. Moreover, it is in the concept of agreement or harmony that the holistic picture of 'being' is clearly seen. Nevertheless, this harmony still remains under an individual genus; but reality is intelligible because it is 'one'.

Given the holistic trend of entire reality, we reaffirm that only the established harmony of individual genus leaves a lacuna. Without, therefore, the unifying and vivifying function of the first overall principle, the whole reality would be chaotic. Hence, the harmony of the various genres is fully appreciated and understood when we associate the variety of genera to the foregoing principles. Some of those principles launched the idea of a universal being in whom all participate. This being which is the first essential principle is supreme and perfects every genus as it has all genera incorporated into its *ens*. Hence, Aquinas precisely delineates the

166 *ST*, I, q. 20, a. 1: "Quod est communius, naturaliter est prius."

167 *SCG*, III, Ch. 66, n. 7: "Quod est per essentiam tale, est propria causa eius quod est per participationem tale."

168 *SCG*, II, Ch. 15, n. 5: "Quod per essentiam dicitur, est causa omnium quae per participationem dicuntur."

169 *ST*, I, q. 33, a. 4, ad 4: "In quolibet genere oportet ponere unum primum."

170 *ST*, I, q. 3, a. 5: "Omnia quae sunt in genere uno, communicant in quidditate vel essentia generis."



analogical nature of reality in relation with the first optimum act. He appropriately shows that "whatever has some perfection by participation, is traced back, as to its principle and cause, to what possesses that perfection essentially."[171] Our highlighted main universal principle is the essential being of all genres. This principle is also akin to the fact that our light of natural reason itself is a participation of the divine light.[172] Our intelligence originates not from ourselves but from the one perfect being in whose nature all finite beings participate. We add that even the existential order is a share in this perfect being; for Aquinas specifies that a thing, first and most perfect in any order, is the cause of whatever follows in that order.[173] This implies that, as the entire reality is an offshoot of the one principal being, subsequently, the order in reality and in its entirety is ascribed to it.

We do not intend to continue with our enumeration of the principles of participation, as there are myriads of instances of such principles. We cited only a few to assist us in our discovery of the Thomistic principles, especially in our envisaged discourse in subsequent chapters. However, through the Thomistic principles of participation, we have seen that Aquinas demonstrates that reality is one of many facets: ultimate being unifies the whole reality in one act of participation. In the Thomistic principles of participation, without falling into the danger of pantheism, Aquinas describes reality as it is.

#### *B.2.4 God as the Prime Principle of Being*

The aforesaid ushers us into a very vital aspect of our inquiry, the ultimate being (*Ipsum esse Subsistens*). Aquinas presents God as the summit and resolution in the investigation into the ontological first principles. In accordance with Aquinas, we hold that God is the prime first principle of all other 'firsts', as such. In many instances in the *Summa Theologiae* and other philosophical works, Aquinas, using several principles, depicts the notion that in God we find the actual principle *per se*. God is the First universal Act. Thereon, Aquinas asserts, "The First Act is the universal principle of all acts; because it is infinite, virtually precontaining all things."[174] This is why finite beings (*esse*), as Aquinas corroborates, participate in God not as their part but by means of the dissemination of his causality. To validate this proposal, Aquinas further suggests that it is proper to God that His essence immaterially comprises everything in a similar way as 'effects' pre-exist virtually in their 'cause'. Only God, then, understands all things through

171 *Comp. Th*, I, Ch. 68.

172 *ST*, I, q. 12, a. 11, ad 3: "Ipsum lumen naturale rationis participatio quaedam est divini luminis."

173 *Comp. Th*, I, Ch. 68: "Quod est primum et perfectissimum in aliquo ordine, est causa eorum quae sunt post in ordine illo."

174 *ST*, I, q. 75, a. 5, ad 1: "Primus actus est universale principium omnium actuum, quia est infinitum, virtualiter in se omnia praehabens."

his essence,[175] because he is also their principle of being. Thus, Aquinas demonstrates that God is *Ipsum esse Subsistens*.

Aquinas, in another place, maintains: "nothing has actuality except so far as it exists."[176] The foregoing reveals that being primarily belongs to God, because he is the most perfect of all things and is comparable to all things as that by which everything becomes actual. The same idea is conveyed by the Thomistic maxim: "this (God) is the first being alone, which is the cause of any being as such."[177] Nonetheless, this cannot be if God is wanting in the excellence of his being. The import is that the very nature of God as the 'first' of all is the 'plenitude of being' (*plenitudo essendi*). He simply 'is'. For any being (*esse*), therefore, to confer existence, it must be perfected in its own act. This is the nature of the activity of the primal actual principle.[178] This act, God, has in his essence the utmost perfection of all that he bestows to any act in reality. And so, it follows that God is the being that gives and perfects actuality to every form in the respective natures (and this is creation).

Moreover, in reality, nothing offers that which it lacks. We also witness the evidence of such in the Thomistic principle which states: "that which is possible not to be, at some time is not."[179] The reason is that the possibility of being and not being (*esse*) cannot guarantee another existence in actuality when the thing in question 'is not.' So far, only God is established to always 'be' (that is eternity). Therefore, everything 'is' because it is made to 'be' and has a 'principle' of being without which it returns to non-being. And non-being, as we know, is void since, due to its nonexistence, the non-being is inaccessible for any intelligibility. Hence, God alone can endow and sustain the existence of all things because he is the fundamental necessary principle that ever exists. This is also depicted in the principle that "whatever is necessary of itself is eternal."[180]

Additionally, from God's immateriality we perceive his complete simplicity. Aquinas uses some principles in a number of occasions to illustrate this idea. On this notion of God's simplicity, we understand through Aquinas that no component can be absolutely first among beings as a result of its composition. Thus, Aquinas also confirms "no part of a compound can be absolutely primal among

175 *ST*, I, q. 84, a. 2: "Hoc autem est proprium Dei, ut sua essentia sit immaterialiter comprehensiva omnium, prout effectus virtute praeexistunt in causa. Solus igitur Deus per essentiam suam omnia intelligit; non autem anima humana, neque etiam Angelus."

176 *ST*, I, q. 4, a. 1, ad 3: "Nihil enim habet actualitatem, nisi inquantum est."

177 *SCG*, II, Ch. 21, n. 10: "Hoc autem est primum ens solum, quod est causa entis inquantum huiusmodi." [Trans mine].

178 *ST*, I, q. 4, a.1: "Primum principium activum oportet maxime esse in actu et per consequens maxime esse perfectum."

179 *ST*, I, q. 2, a. 3: "Quod possibile est non esse, quandoque non est."

180 *SCG*, I, Ch. 15, n. 5: "Omne necessarium per se sit aeternum."



beings."[181] It is, then, incumbent on the absolute being to be completely free of matter and of any complexity in order to be the optimal prime principle. In addition, God is the only actual being (*Ipsum esse*) that enjoys the indicated complete freedom from materiality and compound being. Subsequently, he remains utterly simple.

We further see in God this optimal prime principle as depicted in Aquinas' maxim that nothing can be added to God because God is his own existence.[182] On this premise, we substantiate that God is the proper actual being that admits of no genus at all. This is because, as a perfect existent principle, God 'is not' under any category. He is the fundamental first principle of being prominently manifest in Aquinas' demonstration that the prime principle is essential and prior to anything accidental. Therefore, since God is the absolute primal being, there is nothing in him that is accidental. Thus, God's mode of existence defies any essential accidents since he is absolutely *per se*.

God, as principle, is prior to our intellect that reasons this priority and so he supersedes our intellect.[183] Hence, God simply is, needing no predication under a genus because he is prior to every genus.[184] On account of the priority, we cannot reduce or compartmentalize God to genus. In this way, nature can be associated with and likened to God as principle only in an analogical manner. Aquinas defines and founds the analogical sameness in the truth of this 'super-existent' being (*Ipsum esse Subsistens*) wherein other principles derive their 'truths'.[185] This is why God as the first main principle is simple, not composed, is dissimilar to the parts and to the whole of the universe, and cannot admit of any intricacy which is used to classify the analogical parts. In every reality and in every knowable condition, God is the 'first' principle and assumes the foremost position as he confers the 'first principle' to all other conceivable real first principles.

In continuation, God, the prime first principle, is pre-eminently intelligent. So, even intelligences exist because of their link to God, the original and overall

181 *ST*, I, q. 3, a. 8: "Nulla pars compositi potest esse simpliciter prima in entibus."

182 *ST*, I, q. 3, a. 6: "Ipsum esse nihil aliud adiunctum habere potest."

183 See *ST*, I, q. 13, a. 1: "Deus in hac vita non potest a nobis videri per suam essentiam; sed cognoscitur a nobis ex creaturis, secundum habitudinem principii, et per modum excellentiae et remotionis. Sic igitur potest nominari a nobis ex creaturis, non tamen ita quod nomen significans ipsum, exprimat divinam essentiam secundum quod est."

184 See J. F. Wippel, *The Metaphysical Thought of Thomas Aquinas: from Finite Being to Uncreated Being*, 74–80 and 548. In this diversity of the 'first' primal principle, we find embedded the analogy of being as regards other and subsequent 'firsts' and, through it, all other 'first principles' are justifiable. We shall avoid a copious discourse on this, because it is not directly our concern herein.

185 *In I Sent*, d. 19, q. 5, a. 2: "Unde dico, quod sicut est unum esse divinum quo omnia sunt, sicut a principio effectivo exemplari, nihilominus tamen in rebus diversis est diversum esse, quo formaliter res est; ita etiam est una veritas, scilicet divina, qua omnia vera sunt, sicut principio effectivo exemplari."

first principle. Without God as the first principle of knowledge, human knowledge cannot be ordered as it is. Accordingly, Aquinas through other principles makes us understand that the primacy of God in act lacks no knowledge.

### *B.2.5 Moral Principles*

As we saw in other philosophical spheres, Aquinas has many moral principles, which he utilised to streamline and justify moral existence. We shall not directly study the moral principles in this research. The reason is that as the moral aspect is a wide area and enjoys autonomy, it also deserves a special and detailed treatment. Our intention, therefore, is only to underscore a few basic moral principles for illustration. However, from the outset, we exclude 'synderesis' from our cursory list because we hope to investigate it profoundly. 'Synderesis' is the root of all the practical principles, and our motive is to examine it concurrently with *intellectus principiorum* in an extensive manner under a separate theme. Given the propinquity of the moral principles, we anticipate that through the study we will obtain a real grasp of the argument. With this in mind, let us now briefly examine the moral principles in connection with the good, the human reason, the end, nature and virtue. We note that there are no sharp distinctions as such for the categorisations, since the principles are interrelated. Our attempt to group them is to facilitate the discourse.

#### *a. Some Principles on the Good*

Aquinas portrays man as originally made for the good because man is a rational being and he substantiates his claims. Thus, Aquinas offers a fundamental practical principle that "Good is to be pursued and done and evil is to be avoided."[186] This is, according to the Thomistic legacy, the first absolute moral principle, which is analogous to the PNC. The human existence is fundamentally good and so it is incumbent on the human person to be good. For the act of being (*actus essendi*) in man to be enhanced, man must act not just rationally but he must also choose what is good. Good, as it were, perfects first the person involved in an action before affecting others as part of being. Hence, the option for the good embellishes the human personality and moves him towards his desired goal. Accordingly, we can establish through the above maxim that good is central to the human person's moral life.

In line with the above, it is fitting to note that the good is the proper end of anything. Although Aquinas portrays in another passage that man has another negative influence that draws him to sin (as shown below), he also demonstrates therein that:

> Good can be more pure than evil, for there is some good in which there is no admixture of evil, but there is nothing so bad that it does not have some admixture of good... But in us there is something which always inclines to evil, namely, the tendency to sin... Therefore, there will be something which always inclines to good.[187]

186 *ST*, I–II, q. 94, a. 2: "Bonum est faciendum et prosequendum, et malum vitandum."



The preceding citation demonstrates that the good is always the right tendency for the human reason except for the depraved nature that sometimes staggers on the wrong path. Hence, based on Aquinas' own findings and reflections, we can convincingly assert that man is essentially good-oriented. We affirm, further, that the good is more stable than the bad and leads to a permanent immutable principle.

#### *b. On the Moral Principles of Reason*

In view of the foregoing, Aquinas proposes a principle that: "there is in every man a natural inclination to act according to reason."[188] Aquinas underlines this inclination to demonstrate its importance and the place it generally has in his philosophy. This inclination for Aquinas is supreme in the human person. As a result of the inclination, although man shares being with other creatures, he is distanced from any of them, especially animals. This is because the human being is inherently purposeful. And this characteristic feature in humans is absent in other creatures (living beings). Aquinas further validates the abovementioned by the maxim that to act reasonably is to act in accordance with virtue.[189] Given that man is endowed with the rational faculty to judge and the will to choose, desirable quality becomes necessarily a rational option. If to act according to reason is to act with excellence, then the absence of reason implies no value. That is to say, when man acts viciously, it is more of a bestial act than human, a subdued usage of the rational part of man. This concept fortifies the preceding argument that man is meant to act differently from a beast; for human nature is endowed with a spiritual form. This inclination to act according to reason detects the good and the bad for man through rational activity. To reason rightly is to be regulated accurately in apportioning values; this quality is innate in man: it happens even in the absence of what we can consider as natural law because of the human process of reasoning. No wonder Aquinas in another maxim posits that every sin is against reason and also against nature.[190] This 'dictum' depicts sin, as we are already aware, as a privation. This is because the rational person intrinsically is meant for

187 *De Ver*, q. 16, a. 2, sc 1: "Bonum potest esse magis purum quam malum: quia aliquod bonum est cui non admiscetur aliquid de malo; nihil autem est adeo malum, quod non habeat aliquid de bono permixtum. Sed in nobis est aliquid quod semper inclinat ad malum, ... Ergo et aliquid erit quod semper inclinat ad bonum."

188 *ST*, I–II, q. 94, a. 3: "Naturalis inclinatio inest cuilibet homini ad hoc quod agat secundum rationem."

189 *ST*, I–II, q. 85, a. 2: "... Secundum rationem operetur, quod est agere secundum virtutem."

190 *ST*, I–II, q. 94, a. 3, ad 2: "Omnia peccata, inquantum sunt contra rationem, sunt etiam contra naturam."

the good as indicated above. Likewise, the good is the rational and natural thing that any reasonable person seeks. Hence, the privation of the good, which is sin, goes against the inborn human propensity.

### c. *Principles Pertaining to the End*

The preceding principle ushers us into a random consideration of man's end or goal. The mentioned maxim witnesses to the fact that man's share in being is for an objective. Man participates in being to be fully realised in his personality by the achievement of the final goal. Aquinas further supports the foregoing principle in another maxim that "right reason requires that things directed to an end should be used in a measure proportionate to that end."[191] And so, everything under right reasoning is proportionately employed for the necessary end in view, since man is goal-oriented.

We perceive further that prudence is, for Aquinas, a watchword in morality. Little wonder why he suggests in a maxim that "it belongs to prudence to order other things towards an end."[192] We consider that the principle depicts, in any realistic activity, prudence must be present as a guide, without which things may likely twist to the negative. Prudence always directs actions to the meaningful end. It is like a pointer and companion towards one's goal. In prudence, privation is checked. Privation, as we witnessed in the preceding discourse, follows as a lack of something good. The good (positive) end is a result of the guidance of prudence. As an advocate of Aristotle among the schoolmen, Aquinas cites Aristotle who used prudence as part of his favourite discourses in ethics. We shall avoid discourse on this, as it is not directly connected to our investigation here. Our attention here is particularly with right reason; prudence, in effect, takes the lead for any good action. To act with prudence, therefore, carries a connotation of right reasoning for rational beings. As a follow-up, when one employs prudence in action, all other virtues fall in line to bring man to the desirable good end.

### d. *Natural Principles and Virtue*

We have come to what we can regard as a conglomerate of the practical principles. Aquinas previously gave a principle that distinguishes man as a rational being, which flowed into the principle of the good. Through that we understood that the good is the proper end of man. To reach this end, we discovered that there is need for a constant companion, namely, prudence that ushers in other natural principles. There is, in what follows as a classification, a kind of overview to help us appreciate that Thomistic principles are not usually isolated and taken individually or out of context.

191 *ST*, II–II, q. 152, a. 2: "Habet autem hoc ratio recta, ut his quae sunt ad finem utatur aliquis secundum eam mensuram qua congruit fini."

192 *ST*, I, q. 22, a. 1: "Prudentiae autem proprium est, ..., ordinare alia in finem."



This is to say that reason implies reasoning aright, bringing about the good together with virtue, and it is the natural tendency given the end of man. And so, Aquinas portrays the correlation between the practical principles with the maxim that "the proper end of each moral virtue consists precisely in conformity with right reason."[193]

Right reason as stated in the principle determines moral virtue. It is as if one cannot go without the other. The existence of moral virtue, therefore, is an outcome of correct reasoning. This is a way of saying that for anybody to act rightly consists in blending prudence with the choice of reason, so that it becomes the right choice. The word 'right' makes the entire difference as human persons can reason without letting their reasoning be guided. If such happens, the possible result of the action may then be deprived of the good, which is the main ingredient in any moral act. As we have already underlined, right reason is guided through prudence to determine moral virtue. Virtue, in effect, is a quality and a product of the mind under good guidance.

Further, good rules out every error and the tendency to error. Every right action of man invariably is traceable to the ultimate principle of truth. It is to the good, then, that we can relate anything worthwhile. No wonder the most immutable principle is parallel to truth, as we shall further examine in the transcendence of the first principles. This justifies the reason why one of the most basic tendencies of a person is a continuous search for meaning. The human person, therefore, seeks moral principles to underpin his acts. Aquinas ingeniously relates the idea of the principles with man's quest for good in the following extract:

> In all its activities nature intends what is good and the conservation of the things which are produced through the activity of nature. Therefore, in all the works of nature, the principles are always permanent and unchangeable and preservative of right order. For, as is said in the Physics: "Principles should be permanent". For it would not be possible to have any stability or certainty in things which flow from principles if the principles themselves were not firmly established. Consequently, all changeable things are reduced to some first unchangeable thing. Hence, too, it is that all speculative knowledge is derived from some most certain knowledge concerning which there can be no error. This is the knowledge of the first general principles, in reference to which everything else which is known is examined and by reason of which every truth is approved and every falsehood rejected. If any error could take place in these, there would be no certainty in the whole of the knowledge which follows. As a result, for probity to be possible in human actions, there

193 *ST*, II–II, q. 47, a. 7: "Quod hoc ipsum quod est conformari rationi rectae est finis proprius cuiuslibet moralis virtutis."

must be some permanent principle which has unwavering integrity, in reference to which all human works are examined, so that that permanent principle will resist all evil and assent to all good.[194]

The above demonstrates the fact that no virtue, as Aquinas asserts, goes against the natural inclination.[195] It is rather the opposition to virtue that is hostile to nature. Aquinas, in another principle, establishes that "whatever is contrary to the natural order is vicious."[196] This is the reason why most of what we regard as the human law, in whatever form it holds, obeys the natural order. The natural law directs the basic inclination of the human person. This helps man to realise himself according to his ultimate good and goal in the community where he thrives. Hence, Aquinas, in another maxim, adjoins that any human law should be proportionate to the common good.[197] Being is participatory, and man is a representation of the communal being. Therefore, man should seek to be good and perfected in the human community through laws that genuinely correlate the natural tendency with general good.

## C. The Role of the Principles in Thomistic Philosophy

### *C.1 General Notion of the Use of the Principles*

Aquinas' generous employment of the principles in most of his philosophical works demonstrates the importance he attaches to them and their essential nature in any intelligible reality. This Thomistic preference is also confirmatory and

194 *De Ver*, q. 16, a. 2: "Dicendum, quod natura in omnibus suis operibus bonum intendit, et conservationem eorum quae per operationem naturae fiunt; et ideo in omnibus naturae operibus semper principia sunt permanentia et immutabilia, et rectitudinem conservantia: principia enim manere oportet, ut dicitur in I Phys… Non enim posset esse aliqua firmitas vel certitudo in his quae sunt a principiis, nisi ipsa principia essent firmiter stabilita. Et inde est quod omnia mutabilia reducuntur ad aliquid primum immobile. Inde etiam est quod omnis speculativa cognitio derivatur ab aliqua certissima cognitione circa quam error esse non potest, quae est cognitio primorum principiorum universalium, ad quae omnia illa cognita examinantur, et ex quibus omne verum approbatur, et omne falsum respuitur. In quibus si aliquis error posset accidere nulla certitudo in tota cognitione sequenti inveniretur. Unde et in operibus humanis, ad hoc quod aliqua rectitudo in eis esse possit, oportet esse aliquod principium permanens, quod rectitudinem immutabilem habeat, ad quod omnia humana opera examinentur; ita quod illud principium permanens omni malo resistat, et omni bono assentiat."

195 *ST*, II–II, q. 141, a. 1, ag 1: "Nulla enim virtus repugnat inclinationi naturae."

196 *ST*, II–II, q. 142, a. 1: "Omne illud quod contrariatur ordini naturali, est vitiosum."

197 *ST*, I–II, q. 96, a. 1: "Leges humanas esse proportionatas ad bonum commune."



clearly seen in Livi's proposal that the first principles are connatural to human intelligence.[198] We have, therefore, seen from our list and more possible categories that the principles in realistic philosophy are pivots on which reality itself turns. In as much as they represent being, they also act as judgmental values. No wonder Bearsley equates them to groundings for true philosophical reasoning.[199] The principles are second to none in the field of both speculative and practical philosophy, and to any environment where they are applied or utilised. This is why, in an attempt to portray their importance in any philosophical endeavour, Bearsley affirms that the principles act as an immediate assurance to us about our capability to reason.[200] Consequently, we cannot assert that we can reason appropriately without the basic knowledge of the principles.

Just as an edifice without a firm foundation collapses, any realistic philosophical attempt, especially analytical Thomism, without reference to the first principles, heads for a fall because of the lack of profundity in it. The reason is that the foundation of any reality, as we are aware, assumes more importance than the edifice. Despite the eventual beauty of the structure, without firmness established in the foundation, the construction cannot exist. Therefore, it is not surprising that most scholars consider the principles essential. Elders, like Aquinas, emphatically states that the principles are real 'starting points' because of their indispensability.[201] This can be equated to our use of the word 'foundation'. Given these grounds, we can say that reality 'is' because of its linkage to the first principles. Consequently, they serve for the structuring of the entire reality. Given this fact, Sanguineti asserts that the principles are more profound than we ordinarily appreciate. Considering their essential role, Sanguineti affirms that the first principles are not just a catalogue of basic truths, but that they bring about "fundamental unitary and indivisible knowledge."[202] The principles are, in effect, original.

Furthermore, first philosophy, for instance, that corresponds to Metaphysics, where the first principles find strongest articulation, cannot part with the first principles. We make the affirmation because the first principles express being in plenitude.[203] Accordingly, Sanguineti, in recognition of their crucial

198 See A. Livi, *Filosofia del senso comune: Logica della scienza & della fede* (Milano: Edizioni Ares, 1990), 37. Livi explicates therein that the first principles are judgmental certainties of both speculative and ethical dimensions. According to Livi, in as much as the first principles (*sensus communis*) are connatural to the human intelligence or to human nature, they are the 'patrimony of all'. Hence, Livi affirms the first principles as universal in time and space.

199 See P. J. Bearsley, "Another Look at the First Principles of Knowledge," 575.

200 See P. J. Bearsley, "Another Look at the First Principles of Knowledge," 579.

201 See L. Elders, "The First Principles of Being in the Philosophy of St. Thomas Aquinas," 63.

202 See J. J. Sanguineti, "El conocimiento personal de los primeros principios," in *In Umbra Intelligentiae*, A. L. Gonzalez and M. I. Zorroza, eds. (Pamplona: Eunsa, 2011), 713–727, (716–717).

203 L. Elders, in the same line of thought says that the first principles, "far from being just formulas belonging to logic, … result from the ontological structure of all things. For this reason

import in the realistic philosophy, especially metaphysics, asserts that they are universal. The reason is founded on two grounds: a) the first principles refer to the knowledge of the entire being in its totality; and, b) every human person naturally knows them.[204] Moreover, the philosophy of knowledge, an offshoot of metaphysics, cannot efficiently explore the knowable reality without the first principles. The first principles themselves are the bedrock of any *per se* knowledge. For this reason, Aquinas himself, considering their vital role using the taxonomy of Boethius, regards them as *dignitates* or *per se notae communiter omnibus* propositions.[205] Aquinas, commenting on Aristotle, considers whoever doubts their veracity, essential nature, and function as one afflicted by a sort of *infirmitas* of the mind.[206] Therefore, the good and interesting thing about the first principles is that they are available for the wise and the unwise. The principles are within the reach of the learned as well as the unlettered. In a nutshell, first principles are accessible to all.

As we properly observed that the first principles are lacking in wide scholarship, it behoves us to accentuate that this does not diminish the vitality of the first principles. As a result of their indispensability, many prominent realistic philosophers referred to the principles or utilised them for the purpose of other analyses. Stump, for instance, referred to the principles as foundations of knowledge in her discourse on whether or not Aquinas is a foundationalist.[207] In the discourse, Stump demonstrated the role of the common principles as Aquinas first discovered. Stump categorically stated that these principles are prerequisites to any knowledge; they are known *per se*.[208] It may not be an overstatement, then, to suggest that even though many scholars have not directly studied the first principles, most authors invariably refer to them at some point of their inquiry, either in approval or disapproval. As we concisely illustrated in our first chapter, some eminent scholars from the past, through modernity and the contemporary period, have given the first principles various derogatory interpretations. Nonetheless, the first principles remain quite valid. Obviously, Aquinas did not invent the first principles.[209] However, Aquinas is, as we said, the man of the first principles among the schoolmen. In addition to his development of Aristotle's notions, Aquinas discovered the holistic first principles with their relations and enhanced their utility. This implies that, given their effectiveness, anyone who really discovers the first principles always depends on them for any enterprise.

they are studied in metaphysics." See L. Elders, "The First Principles of Being in the Philosophy of St. Thomas Aquinas," 94.

204 See J. J. Sanguineti, "El conocimiento personal de los primeros principios," 714.

205 See *ST*, I–II, q. 94, a. 2.

206 See *In IV Metaph*, lect. 15, [Aristotle. *Met* IV, 6.]

207 See E. Stump, *Aquinas*, 227.

208 See E. Stump, *Aquinas*, 227. See also *In I APst.* lect. 14, n. 3; *In I APst.* lect. 44, n. 3.

209 See *In I APst.* lect. 19, n. 3.



The ascendancy of the first philosophy is facilitated with the doctrine of the first principles. No wonder Aquinas sometimes depicts a parallel between that which is the first to be grasped by the intellect, *ens*, and the model of the first principles. Thus he says:

> For that which, before aught else, falls under apprehension, is "being," the notion of which is included in all things whatsoever a man apprehends. Wherefore the first indemonstrable principle is that "the same thing cannot be affirmed and denied at the same time," which is based on the notion of "being" and "not-being": and on this principle all others are based. [210]

### *C.2 The Role of the Principles in Being*

Having in mind the above general idea, we pose the question: for what purpose do the first principles serve the intelligibility of existence? It may not be an exaggeration to suggest that Aquinas' ability of intuition into the intelligible reality brings him to a better perception of so many principles about the coherent structure of existence.[211]

The principles help in the intellectual intuition of every being; with them one can rise to the very beginning of all reality, that is, God. These super-sensible ontological realities (the first principles) offer intellectual access to valid meta-empirical inference.[212]

The idea of the first principles includes the notion of 'being' as 'being' (*ens in quantum ens*). In this sense, the authentic and first 'primal principle' is being itself, which occupies the summit for the principles of things.[213]

Although the first apprehension in the ontological reality is the affirmation of being (*ens*), all the same, the first principles are presupposed as the origin of the thought process.[214] Thus, the first principles precede the actual assertion of *ens*.

210 *ST*, I–II, q. 94, a. 2: "Nam illud quod primo cadit in apprehensione, est ens, cuius intellectus includitur in omnibus quaecumque quis apprehendit. Et ideo primum principium indemonstrabile est quod non est simul affirmare et negare, quod fundatur supra rationem entis et non entis, et super hoc principio omnia alia fundantur."

211 See L. Elders, "The First Principles of Being in the Philosophy of St. Thomas Aquinas," 93.

212 See V. Possenti, "L'intuizione astrattiva e i primi principi speculativi nel tomismo, V, Problemi metafisici," in *Atti dell'VIII Congresso Tomistico Internazionale* (Città del Vaticano: Libreria Editrice Vaticana, 1982), 93–146, 143.

213 See V. Possenti, "L'intuizione astrattiva e i primi principi speculativi nel tomismo," 113.

214 The realistic first principles embodies, instructs, and infiltrates every aspect of our understanding. They are not prime things we come to know as objects of knowledge, rather they are, as Bearsley called them, part of our 'mental equipment', powers that guide our thinking

The first principles form part of the originality of 'being' (*ens*) and, while balancing this notion, they ground it also. The notion of the Thomistic first principles, represented essentially in PNC/identity, helps us to apprehend the double-sided profundity and evidence of authentic reasoning and being. Such standards are: being is not non-being (A is not non-A); from the finite to the infinite; from the limited to the unlimited; and that 'every' (as such) is not identical with 'all' (numerically).[215]

The first principles usually refer to being, as such. There cannot be any affirmation in being without the implicit notion of the first principles. Hence, we can justifiably assert that the expression of the first principles is indispensable for the sustenance of being and its prospective notion.[216] This implies, in the strict sense of the word, that nothing is outside the first principles.

As we indicated earlier, some of the mentioned principles are interconnected, demonstrating comprehensibility in being. The first principles underpin nature, and this explains their hierarchical arrangement; they demonstrate the realistic ordering of being. The principles show that all things in nature are knowable, and the moment we grasp them, those things become less bewildering.[217] They illustrate that nature 'is' and cannot but 'be'. First principles are inherent and so serve even when not accepted. The first principles are natural because they are inseparable from our nature. They continue to serve, desired or undesired. Hence, the first principles are akin to the skeleton of the body, without which the body is not sustained.[218]

We see Aquinas' insight portrayed through the depiction of the first principles as intelligibles through which 'being' is seen as 'being' (*ens*) and as 'one'. The first principles serve as prototypes of the one 'excellent being' (*Ipsum esse Subsistens*). This indicates that the first principles of being necessarily lead us to the independent untainted first primal being and principle.

The Thomistic first principles demonstrate the wisdom of Aquinas in presenting being as 'all in one' and 'one in all' through *reductio ad unum* yet without falling into the fallacy of pantheism or monism.[219] The implication is that, through the first principles we can put together and reconcile two naturally opposed realities, the one and the many, by reduction to the one. Fabro's

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processes. We can, therefore, understand Aristotle's and Aquinas' allusion to the principles (as *γνωριμωτάτην* or *notissimum*, respectively) as sustaining their intrinsic and indispensable nature.

215 See also M. L. Buratti, "I principi primi secondo San Tommaso," 234–235. See also A. McNicholl, "Negation," in *Atti del Congresso Internazionale, Tommaso D'Aquino nel suo settimo centinario*, Voll. Vol. 6 (Napoli: Edizioni Domenicane Italiane, 1974), 654–664.

216 See also M. L. Buratti, "I principi primi secondo San Tommaso," 233.

217 See P. J. Bearsley, "Another Look at the First Principles of Knowledge," 580.

218 See P. J. Bearsley, "Another Look at the First Principles of Knowledge," 575.

219 See V. Possenti, "L'intuizione astrattiva e i primi principi speculativi nel Tomismo," 145.



explication of Thomistic doctrine of analogy (of the principles) here touches the core of our discourse as he presents Aquinas' formula as the definitive expansion in the conception of being (*esse*).[220] The entire reality remains one by the principles, while the principles, simultaneously, address the many facets of all derived 'firsts'. The Thomistic doctrine of the first principles, therefore, encompasses the derived 'firsts' and the 'absolute first' according to their levels of progression.

We grasp through the first principles that, in addition to the fact that reality is one, individual beings refer to the one and give meaning to the whole intelligible world. Hence, the principles let us understand that reality is a unity of differences. In the non-generated united first principle without genus, the species with different genus are generated. This 'one' is, so to say, the mover of the world.

It is easy to decipher from the above that the first principles blend so well the ideas of *ens per se* and *ens* in relation with others without self-contradiction. The first principles intrinsically lend entity (*ens*) to comprehension because they are the reason for its internal principle, the act of being (*actus essendi*), and they justify and delimit its actuality. We determine what exists in being distinctly through the first principles. Some may contend this idea only to return to it since it is self-evident.[221] Thus, we think, this Thomistic insight brings authentic intelligibility of reality to its peak.

## D. Conclusion

In conclusion, we have seen through a fairly extensive examination of the varied Thomistic principles that they constitute a profound and holistic doctrine in Aquinas. We saw through our perusal of the various modalities of being (*ens*) that the principles occupy a prominent place in Aquinas' concept. Through Aquinas' writings we came to appreciate that Aquinas has many unarticulated (overlooked) principles that enhance reality. We noted also that the doctrines of the 'one and the many' and analogy are well blended in the theory of the first Thomistic principles.

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220 See C. Fabro, *Partecipazione e causalità secondo S. Tommaso d'Aquino*, 499–500. See also *In IV Metaph*, lect. 1, n. 8: "... Sciendum quod illud unum ad quod diversae habitudines referuntur in analogicis, est unum numero, et non solum unum ratione, sicut est unum illud quod per nomen univocum designatur. Et ideo dicit quod ens etsi dicatur multipliciter, non tamen dicitur aequivoce, sed per respectum ad unum; non quidem ad unum quod sit solum ratione unum, sed quod est unum sicut una quaedam natura."

221 See M. L. Buratti, "I principi primi secondo San Tommaso," 231–232. On *per se*, see E. Stump, *Aquinas*, 227.

We discovered through the discourse that Aquinas uses the principles for the elaboration of particular topics.[222]

We supposed further through our investigation that several principles are not referred to by many authors because the theme 'first principles' has not been well researched by Thomists.

Moreover, due to the fact that many principles are derived from higher principles, authors usually overlook their effectiveness even while they utilise them.

We accentuated the fact that despite the derivative nature of many of the principles, they are widely employed in Aquinas' explanations. Moreover, the principles can conveniently be re-united (retraced) to the first higher principles and, finally, to the uncaused cause, the infinite reality, what Aquinas fittingly qualifies as God. From this premise, we discern that the principles are true depictions of reality as communal and encompassing. The principles, therefore, are a rich inheritance that can be conveniently applied to any aspect of reality.

222 See L. Elders, "The First Principles of Being in the Philosophy of St. Thomas Aquinas," 94.

# Chapter 3
# The Knowledge of the First Principles

In the preceding chapter, we located and examined the first Thomistic principles globally as applied to every reality or 'being'. We tried, in the mentioned discourse, to convey the true picture of the first principles from two perspectives of *per se nota omnibus* and *per se nota sapientibus* as enhancing nature in its interconnectedness and interdependence. In the investigation, we discovered that every reality is intentionally oriented. In addition, we saw that this intentional impetus of beings keeps them in a continuous state of becoming and perfection with the exception of God, the one prime being, wherein all 'firsts' are resolved. We realised through our inquiry that nothing in potency perfects itself except through an active agent. We further recognised that the Thomistic notion of participation is the hub of Aquinas' metaphysics, which recapitulates his *compositio* and *resolutio* approach. We implicitly accentuated that the 'integral truth' of Thomism is embedded in the mentioned participatory Thomistic notion.[1] We understood that the ultimate activity personalised in God is the first of all first principles. Finally, we established that the first Thomistic principles are foundations of every knowable reality, and that all principles are ascribable and retraceable to God, the perfect act.

In this section, since knowledge belongs to the rational being, we wish to discover the import of the major first Thomistic principles on the level of man's knowledge. To facilitate a better comprehension, we intend to examine the conception of the first principles through *intellectus* and *ratio*. In addition, to help us have a better grasp of the argument already indicated, we will briefly consider the analysis of a few Thomists on Aquinas' understanding of the *primum cognitum*. This is intended to serve as a lead to further investigations in our research. We shall, also, concisely look at the signification of *separatio* in Thomistic conception as a major element in the entire corpus of foundational knowledge.

Lastly, through our attention to some transcendental notions, we hope to ascertain the affinity of the *prima principia* with the *primum cognitum intelligibile*. We shall conclude this section with the indicated study.

1 See C. Fabro, *La nozione metafisica di partecipazione*, 120.

## A. Conceptual Apprehension and Primitive Judgment

We begin by considering the term 'knowledge' in its realistic context. Before that, we deem it necessary to briefly examine the Thomistic conception of the 'mind'. Different from contemporary philosophers, Aquinas upholds a meta-philosophy.[2] This implies that Aquinas is metaphysically rooted in all his philosophical enterprise. By way of approach, Aquinas constructs his ontology first, and then aligns his epistemology and what the present-day philosophers regard as the philosophy of mind on the said ontological analysis. Scholars, like MacDonald, represent this view when they suggest that Aquinas does not develop his system on a theory of knowledge, but on the basis of other branches of his system, especially, metaphysics and psychology.[3] Likewise, in his discourse on Aristotle and Aquinas, Haldane expresses a similar opinion by arguing that without ontology, there is no epistemology.[4] Haldane proposes further that, unlike modern and contemporary philosophers, Aristotle and Aquinas utilise a different and realistic philosophical approach to knowledge. Accordingly, he says that our knowledge starts from the external world in order to explain and not to justify our knowledge, and to render an account of the cognitive scope, its origin and processes.[5] In the same vein, we think that Aquinas is more concrete in articulating his speculations on the cognitive processes than many modern and contemporary epistemologists.

In our mind, the problem of some current philosophers hinges on epistemological *apriorism*, which goes against the grain of Thomistic meta-philosophy. Aquinas is more factual in his epistemological methodology and often accentuates the significance of the notions of *esse intentionale* and *esse*

2 See A. J. Lisska, "Medieval Theories of Intentionality: from Aquinas to Brentano and Beyond," in *Analytical Thomism: traditions in dialogue*, C. Paterson and M. S. Pugh, eds. (Aldershot: Ashgate, 2006), 147–169, 152.

3 See S. MacDonald, "Theory of Knowledge," in *The Cambridge Companion to Aquinas*, N. Kretzmann and E. Stump, eds. (Cambridge: Cambridge University Press, 1993), 160. Because of its significance to our quest, we quote his text: "Aquinas does not build his philosophical system around a theory of knowledge. In fact the reverse is true: he builds his epistemology on the basis provided by other parts of his system, in particular, his metaphysics and psychology. To examine what we can recognize as a distinct and systematic theory of knowledge, then, we need to extract his strictly epistemological claims from the metaphysical and psychological discussions in which they are embedded." S. MacDonald, "Theory of Knowledge," 160.

4 See J. Haldane, "A Return to Form in the Philosophy of Mind, " in *Form and Matter: Themes in Contemporary Metaphysics*, D. S. Oderberg, ed. (Oxford: Blackwell Publishers, 1999), 54.

5 See J. Haldane, "Insight, Inference and Intellection," in *Proceedings of the American Catholic Philosophical Association* 73 (1999), 31–45, 38.



*naturale* to assist us in understanding the different role models in the problem of knowledge.[6] This Thomistic tendency in categorisation is also a way of distinguishing between the knower and the non-knower that provides an aid for epistemological analysis. The obscurity of Thomistic metaphysical language in Aquinas' cognitive discourse may often pose challenges to his readers. For instance, Aquinas' assertion on the ontological basis of knowledge in his *Commentary on Aristotle's De Anima* that the form received by the recipient is without matter[7] is a problem with which some readers still grapple. How can one receive the form without the matter? Does the form received reflect exactly the material object in question? How can that be considered as real knowledge? These and others are problems resulting from Aquinas' meta-philosophy that we hope to examine in due course.

### *A.1 The Starting Point of Knowledge*

Following the above, we suppose that although knowledge is a common phenomenon, it also has a complex nature. It is, therefore, not easy to speculate on knowledge without designating the expression 'knowledge'. Just as in 'being', knowledge is a wide concept. Nonetheless, we do not think about being and knowledge in the same category. Knowledge is a limited concept that deals with the cognitive part of higher living beings, while reality is holistic. The former is the offshoot of the latter. Reality first 'is' before it is known; that is to say, in the natural hierarchy, the category of being goes before the level of understanding. The level of reality is prior to the degree of the intellect's appreciation of it. The known is known, as such, because of the 'being' (*esse*) of the knower. The import is that being (*ens*) is the fundamental inquiry in knowing. Knowledge, therefore, is on the secondary level of appreciation; it presupposes being (*ens*). Accordingly, Aquinas deduces that "although true knowledge requires that knowledge correspond to things, it is not necessary that knowledge and thing should have the same mode of being."[8] Hence, as we mentioned in our previous chapter, without reality we cannot think of knowing even the first principles. Although Aquinas does not explicitly state that knowledge relates directly to the environment, we infer that it is implicit in the foregoing proposal. Given the fact that 'correspondence' suggests relationship with the object in any situation, hence, for knowledge to correspond to things

6 See A. J. Lisska, "Medieval Theories of Intentionality: from Aquinas to Brentano and Beyond," 153. We suspend comments on *esse intentionale* and *esse naturale* as we hope to come back to it shortly.

7 See *In II De Anima* lect. 24, n. 3: "Et per hunc modum, sensus recipit formam sine materia, quia alterius modi esse habet forma in sensu, et in re sensibili."

8 *SCG*, II, Ch. 75, n. 8: "Quamvis enim ad veritatem cognitionis necesse sit ut cognitio rei respondeat, non tamen oportet ut idem sit modus cognitionis et rei."

there must be an existent rapport between them.[9] Besides, knowledge suggests a restriction in reality because some existent things do not know. This is because, as Aquinas proposes, only sensitive entities can know, and real knowledge belongs specifically to the animate being (*esse*). Plants cannot know since they are only material beings. Thus, Aquinas, in line with Aristotle, appositely observes, "plants do not know, because they are wholly material."[10]

Furthermore, Aquinas largely submits that knowledge is examinable on three distinct levels. The first is the lowest category of sensitive knowledge. Secondly, we have human knowledge, which is at the mid-point between the unmixed knowledge and the purely sensory knowledge. Thirdly, there is the angelic or God's knowledge that is without the admixture of matter.[11] Obviously, on the third category, a remarkable difference typifies the angelic and the divine knowledge. This implies that, although the constituent of the angelic knowledge is non-material, nonetheless, it has potency devoid of pure perfection. Hence, God's knowledge is absolute because it is a pure knowledge exclusive of any potentiality.

Obviously, from the above-mentioned categories, it is deducible that the mid-point, that is, man's mode of acquisition of knowledge, is our main focus for the sake of this paper. As we already emphasised, when one thinks of knowledge, instinctively, there is a tendency to contextualise it in the human person. This is to say that, usually, as soon as knowledge is referred to in any inquiry, the human mind thinks first of the rational being. This is so because the human person is a being (*esse*) endowed with intelligence and is in continual quest for knowledge.[12] Essentially, in most of his discourses, Aquinas conveys the idea that knowledge *per se* is attributable to God, the first of all principles. Nonetheless, we exclude God in our investigation of this process of knowledge of the first principles beginning with sensation in the human person. This is due to the fact that, as we previously mentioned, knowledge belongs pre-eminently to God.

9 This affinity can be three-dimensional, the physical, the psychical, and the spiritual. However, we suspend details on this argument as we hope to come back to it subsequently.

10 *ST*, I, q. 14, a. 1: "Plantae non cognoscunt, propter suam materialitatem."

11 As we are already aware, the fact that God's knowledge is on the third level does not suggest parity. God's knowledge is at the peak of all knowledge. We will not dwell on this fact because it is not our main concern here. See *ST*, I, q. 14, a. 1; See also *ST*, I, q. 85, a. 1 for more details on the three degrees of knowing powers.

12 Aquinas generally discusses both the angelic and divine knowledge together with human knowledge to demonstrate the difference between the three categories. For the sake of this paper, except for a few instances where we shall refer to the disembodied entities, we shall concentrate on the human mode of acquisition of knowledge. This is because here there is no concern as such as to how the disembodied souls like angels and God possess knowledge.



Knowledge is only an analogical concept that we wish to discover in the rational being with regards to the first principles. Before we can adequately delve into the inquiry on the knowledge of the first principles, we want to briefly accentuate the manner of man's actual knowledge. This will help us arrive at something concrete about the human being's endeavour to comprehend the first principles. Consequently, we intend, in our research, to determine how the human person takes precedence over any other finite being. Therefore, it belongs to the human person as a rational creature to appreciate and enhance reality as it is.

It might not be hyperbolic to suggest that knowledge is a banal possession of every human person. Even so, there is more to this claim. Knowledge, so to say, likens the human person to the infinite. Aquinas adequately demonstrates this fact in the following excerpt from Aristotle that "the soul is … all things".[13] He supports the argument by reason of the soul's infinite capacity. Aquinas takes this further to depict that the soul by knowing is somehow adapted to the form of the known.[14] The soul, in a way, through the knowledge of everything becomes all things. Hence, the person who knows is united in some way with the object known. This is to say that the person is assimilated somehow in the thing known in order to establish union with it. This unification is obviously not physical, and that is why the Thomistic argument cancels knowledge in purely material things. All the same, the process of the immaterial knowledge starts with the commonly recognised phenomenon of abstraction of the material. As Aquinas illustrates, that happens when the material obtained through sensation is abstracted in the incorporeal. Given the verity that the soul cannot know the material thing as such, the process of knowledge begins with the senses. The reason is that the soul, because of its immateriality, knows a thing through a kind of immaterial possession.[15]

A quandary arises herein. How can we assert the immateriality of the soul simultaneously with the material nature of the initial procedure of knowledge? How does the data from material substance act upon the spiritual power of the intellect? Obviously, our psychical functioning is perceived here. We shall resume this discourse on intuitive abstraction, subsequently, for more appropriateness.

When one comes to know anything, then, something is added to the individual. This happens without any alteration in the subject's being (*esse*) because the additional entity, which is known, is immaterial. However, following

13 *ST*, I, q. 14, a. 1.

14 *De Ver*, q. 24, a. 10, ad 2: "Sed natura spiritualis est facta quantum ad secundum esse suum indeterminata, et omnium capax; sicut dicitur in III De anima, quod anima est quodammodo omnia: et per hoc quod alicui adhaeret, efficitur unum cum eo."

15 *ST*, II–II, q. 27, a. 4: "Actus cognitivae virtutis est secundum modum cognoscentis."

the acquired knowledge, the individual is no longer as the subject was before the appreciation. The knower becomes equipped, namely, with the contents of knowledge.

Taking this further, we realise, as Aquinas asserts, that an extension occurs in the knower.[16] This is why knowledge is commonly said to be 'intentional' (*sui generis*) because it is a process whereby the known is incorporated into the knower.[17]

From this, we can ascertain that knowledge is not just potency but also a vital phenomenon. There is a vital progression from the original state, from not knowing to knowing by way of operation or by way of habit. Hence, the knower is fortified to being (*esse*) and to doing more than prior to the known item. Knowledge is, in this way, transcendental, as we shall come to examine shortly.

### *A.1.1 Sensation and Experience*

As we reflected above, Aquinas generally defines knowledge as conformity to being. This is to say that to know presupposes being. At the same time, Aquinas' fundamental belief is that "nothing is in the intellect that was not previously in sense."[18] This implies that the inception of the process of knowledge is by the sensation of the material world. According to Boncinelli, sensations are analogous to the segments of reality that are carved out from the physical phenomena.[19] For Aquinas, this entails a direct and immediate contact or experience of physical reality. Although sometimes the Thomistic metaphysical idiom seems to make the idea obscure, it is evident that to have sensation is not identical with the possession of knowledge. The Thomistic realistic concept of sensation is analysable under three dimensions: the physical, psychical, and

16 *ST*, I, q. 14, a. 1: "Natura rerum cognoscentium habet maiorem amplitudinem et extensionem." And *De Ver*, q. 2, a. 2: "Unde ut huic imperfectioni aliquod remedium esset, invenitur alius modus perfectionis in rebus creatis, secundum quod perfectio quae est propria unius rei, in altera re invenitur; et haec est perfectio cognoscentis in quantum est cognoscens, quia secundum hoc a cognoscente aliquid cognoscitur quod ipsum cognitum est aliquo modo apud cognoscentem."

17 Intentionality is crucial in human knowledge and the meta-philosophy of Aquinas. It is not identical with spirituality. Aquinas' account of intentionality is an enormous one that we will not fully delve into in this paper. It is just enough to accentuate that Aquinas views intentionality as incapable of further analysis, which means that, for him, it is a primitive or *sui generis* feature of concepts. For Aquinas, intentionality is not reducible to or explainable by a basic thing but is postulated as an unanalysable feature of those who possess it. When Aquinas speaks of the mind's intentional possession of the forms of objects, he implies that the mind possesses an intention of that form (i.e. a representation, which intends or brings it about). For further reading, see J. E. Brower and S. Brower-Toland, *Aquinas on Mental Representation: Concepts and Intentionality*, in <http://web.ics.purdue.edu/~brower/Papers/Aquinas%20on%20Mental%20Representation.pdf>, accessed June 2011.

18 *De Ver*, q. 2, a. 3, ag 19: "Nihil est in intellectu quod non sit prius in sensu."

19 See E. Boncinelli, *Il cervello, la mente e l'anima* (Milano: A. Mondadori, 1999), 110ff.



the metaphysical. From the physical aspect, sensation is a material organic act, which is subject to description, also, in electrical and chemical transmissional terms with references to cells (neurons). This dimension is the material cause of sensitive acts. Sensation, on the psychological level (*qualia*), is more than purely physical.[20] The metaphysical dimension of sensation brings us to the reality that it is an act of him who senses. Pain, for instance, belongs to 'a person', to 'an individual'. For a holistic grasp of the reality of sensation, there is need to blend its psychophysical description with the metaphysical notion. In fact, even when not mentioned, the metaphysical understanding is presupposed and implied. And so, the three dimensions go together in realistic philosophy and are inseparable.[21]

On the other hand, experience in a Thomistic context further connotes a sort of knowledge of reality that can be attained through the senses and memory. Aquinas uses the terms *experientia* and *experimentum* synonymously, and that may be attributed to his times.[22] Experience is explicable in Aquinas following Aristotle's discourse in the *Metaphysics*. For Aristotle, experience is cognition of particulars; at the same time, one cannot ignore the particulars because of their import.[23] Aquinas, in his treatise, *In Libros Metaphysicorum*, corroborates that:

> In men experience is caused by memory. The way in which it is caused is this: from several memories of a single thing a man acquires experience about some matter, and by means of this experience he is able to act easily and correctly.[24]

In addition to the foregoing, Aquinas connects the concept of experience to sensitive experience and that is why we treat both under the same sub-heading. However, Aquinas does not forget the fact that, analogically, experience can be correlative to intellective knowledge.[25] Aquinas also posits a *cognitio experimentalis*, which has an intellective but not sensitive nature. Nonetheless, this does not have a conceptual characteristic but a 'factual' one. This is to say that through this sort of

20 According to some analytical philosophers, sensation on the psychical level is *qualia* in the sense of original quality that is not reducible to something non-qualitative.

21 See J. J. Sanguineti, *Introduzione alla gnoseologia*, 46–47.

22 This nuance was brought about by the Latin translation of the Greek Aristotelian metaphysical term, *empeiria* as *experientia* and *experimentum*. See B. Mondin, *Dizionario enciclopedico del pensiero di San Tommaso d'Aquino* (Bologna: Edizioni Studio Domenicano, 2000), 255.

23 See *Met*, I, 981a 21–22.

24 *In I Metaph*, lect. 1.

25 See *ST*, I, q. 54, a. 5, ad 1: "Alio modo potest dici, quod auctoritates illae, et consimiles, sunt intelligendae per quandam similitudinem. Quia cum sensus certam apprehensionem habeat de proprio sensibili, est in usu loquentium ut etiam secundum certam apprehensionem intellectus aliquid sentire dicamur. Unde etiam sententia nominatur."

experience one knows 'the what' and not 'the why'. This is the means by which a person knows himself through his own operations (*experimentali cognitione*). According to the Angelic Doctor:

> Those things which are in the soul by their physical reality, are known through experimental knowledge; in so far as through acts man has experience of their inward principles: thus when we wish, we perceive that we have a will; and when we exercise the functions of life, we observe that there is life in us.[26]

This implies that we have the consciousness of the will to the extent we want and we have the experience (knowledge) of life to the extent that we live. Hence, *experientia* or *experimentum* deals more with the consciousness in the act of the sensation. Through sensation experience has its full import.

In view of the preceding subtle distinctions, we maintain that since we can only perceive that which we sense, all knowledge, therefore, stems first from sensation. In line with this view, Aquinas succinctly recapitulates his notion of sensation and material experience thus:

> I answer that, as stated above ..., the object of knowledge is proportionate to the power of knowledge. Now there are three grades of the cognitive powers. For one cognitive power, namely, the sense, is the act of a corporeal organ. And therefore the object of every sensitive power is a form as existing in corporeal matter. And since such matter is the principle of individuality, therefore every power of the sensitive part can only have knowledge of the individual.[27]

Aquinas' idea of sensation is very common among Thomists because of its import in the realistic knowledge scheme. The said Thomistic model follows after Aristotle's suggestion that sensation results from a sort of movement and a kind of quality change effected through an external object's action on the sense organ.[28] In addition, Aristotle notes that the movement and change implied

26 See *ST*, I–II, q. 112, a. 5, ad 1: "Quod illa quae sunt per essentiam sui in anima, cognoscuntur experimentali cognitione, inquantum homo experitur per actus principia intrinseca, sicut voluntatem percipimus volendo, et vitam in operibus vitae."

27 *ST*, I, q. 85, a. 1: "Respondeo dicendum quod, sicut supra dictum est, obiectum cognoscibile proportionatur virtuti cognoscitivae. Est autem triplex gradus cognoscitivae virtutis. Quaedam enim cognoscitiva virtus est actus organi corporalis, scilicet sensus. Et ideo obiectum cuiuslibet sensitivae potentiae est forma prout in materia corporali existit. Et quia huiusmodi materia est individuationis principium, ideo omnis potentia sensitivae partis est cognoscitiva particularium tantum."

28 Aristotle, *De Anima*, II, 417a 7–9: "It is clear from this that the faculty of sensation has no actual but only potential existence. So it is like the case of fuel, which does not burn by itself



herein is not just a physical one as in material reality, but has to do more with what we may regard as psychical.[29] From this Aristotelian perspective we grasp that the change involved in sensation is a kind of fulfilment of potency without the loss of the former form of the knower. This proposal does not suppose pure passivity on the part of the senses. On the contrary, sensation is a vital immanent process. The sense of the alteration implied, then, is a sort of completion rather than an extermination of the existent form.[30] Further, when we talk about the sense organ, we presume that anyone acquainted with the five senses is already informed that each of the senses possesses an organ. This is to say that each sensation is articulated in a particular part of the body, which is naturally sensitised to the objects of the specific sense.

In the natural order, sensation is the lowest part of the knowledge enterprise in the human person. One of the reasons is that senses are part of the things human beings and animals share in common.[31] In Aquinas' realistic model, sensation plays a vital role in the process of knowledge. Our knowledge of reality, as it were, begins with sensation and is perfected in the intellect. Although our quest relates directly to the knowledge of the first principles, there is no knowledge according to the realistic system whose origin is not always from sensation, even for what we termed *statim* in grasping the first principles in our previous chapter.[32] As we mentioned above, according to Aquinas' realistic system, sensation goes concurrently with the experience of reality. Reality, as it is, registers first in the senses. This implies that we experience 'being' in reality only through sensation in order to 'know' it. Without delving into the detailed elaboration of the functions of the five known senses, that is, the tactile, sight, smell, hearing, and taste, we consider right away the significance of sensation for knowledge. As Kenny suggests, the objects of the senses are the phenomena that correspond to each sense organ and are detectable by any of the senses.[33]

without something to set fire to it; for otherwise it would burn itself, and would not need any fire actually at work."

29 Aristotle, *De Anima*, II, 417b 1–10: "Also the expression 'to be acted upon' has more than one meaning; it may mean either (a) the extinction of one of two contraries by the other, or (b) the maintenance of what is potential by the agency of what is actual and already like what is acted upon, with such likeness as is compatible with one's being actual and the other potential. For what possesses knowledge becomes an actual knower by a transition which is either not an alteration of it at all (being in reality a development into its true self or actuality) or at least an alteration in a quite different sense from the usual meaning."

30 See Aristotle, *De Anima*, II, 417b 15–17.

31 See A. Kenny, *The Metaphysics of Mind*, (Oxford: Clarendon Press, 1990), 97.

32 Further on in our discourse, we hope to examine in detail the significance of *statim* in Thomistic proposal on the knowledge of the *primum cognitum intelligibile* as well as the first principles.

33 See A. Kenny, *The Metaphysics of Mind*, 98.

In Thomistic philosophy, sensation occurs on two different levels, namely, the internal and the external. The external sensation refers to the relationship of the external environment to the sentient. Here, the five senses play a major role because of their immediate contact with external reality. These senses gather together both qualitative and quantitative aspects of bodies that surround a sensitive body and act on them. By so doing, the sentient selectively receives through the sense channels a fragmentary multiplicity of information of a condition and the physical vitality of surroundings. The internal sensitivity, in other words, the combination of integral perception, imagination, and memory, interiorises and elaborates the signals received from the external senses. Moreover, jointly with the emotions and instincts, it 'objectifies' (forms the object) and 'interprets' the data. This sensitivity regards, also, the awareness of one's own body (sensible consciousness). The entire mechanism is geared towards the optimisation of the environment and the sentient.[34]

Therefore, the first instance of the living being's contact with the environment is through any of the senses. This means that the action of the sensible object receives an immediate reaction on the part of the sense organ. The said reaction is of two-fold modality: physical and psychical ('intentional'). Intentionality (*tendere-in*) of the object herein, in so far as it is a cognitive operation, includes a transcendental rapport with the thing known or reality. This intentional relationship is an immediate and essential kind.[35] Additionally, the response is proportionate to the nature and extent of the stimulus that acts upon the sense organ. Hence, there is a reaction to a stimulus in sensation. The psychical reaction is the quintessence of sensation, because the sense potency intentionally becomes the sensible object. What happens, at this point, forms part of our major interest, because it is a crucial contact with the environment. Knowledge at this level is not an understanding of the nature of the sensible quality.[36] Sensation simply comprises the reception of sensible qualities of things through an external sense organ and becomes somewhat those qualities immaterially or in an intentional way. It goes with impressions or 'impressed species'. During the sense experience,[37] objects in the form of impressions

34 See J. J. Sanguineti, *Introduzione alla gnoseologia*, 57.

35 See J. J. Sanguineti, *Introduzione alla gnoseologia*, 32.

36 See H. Reith, *An Introduction to Philosophical Psychology*, 88.

37 'Sensation' as a first instance of knowledge technically differs from 'perception'. 'Perception', strictly speaking, is more attuned to the activity of the internal sense organs because it is not just sensation but an awareness of 'sensation'. Even though there is no agreement among philosophers (past and present) on this, for the sake of this paper, we will treat both under the same heading. Scholars like A. Kenny, for instance, do not care to make this distinction in the above-cited work, *The Metaphysics of Mind*, 97–112. H. Reith in his already cited text: *An Introduction to Philosophical Psychology*, 83, distinguishes between the two phenomena.



register as they are singular unprocessed data on the knower. These impressions (representations)[38] are not formal or *per se* knowledge but a principle or 'virtual likeness' for the acquisition of knowledge. This depicts the impressions as non-objects of knowledge but instrumental to it. The further implication is that the impressed species are not the object of knowledge but the sensible form. This is because the species are not entitative but intentional sensible forms. Hence, our sensation is the form of the object, which acts upon us in any sensible experience. Besides, these impressions, as long as they are under the auspices of the senses, remain particular until the abstraction process takes place in the intellect. These gathered impressions are received by the internal sensory organs and are processed further and directed to the intellect for proper processing. Hence, the senses and sensible experience act as an intermediary between reality and the intellect. Each of the senses is a way to acquire knowledge about the environment and about the properties of matter in reality. From the outset, commenting on Aristotle's *De anima*, Aquinas justifiably asserts that for the occurrence of knowledge, senses receive forms from substances, as follows:

> And it is thus that a sense receives form without matter, the form having, in the sense, a different mode of being from that which it has in the object sensed. In the latter it has a material mode of being, but in the sense, a cognitional and spiritual mode.[39]

Aquinas points to the reality that senses only receive impressions of a thing, not a thing as itself. However, to understand Aquinas one needs to be acquainted with his onto-epistemological approach already underlined, which stems from the Aristotelian *Metaphysics*.

The foregoing explains the indispensability of sensation in human understanding of reality. Without sensation nothing is known to the intellect, as such. Therefore, even 'being' and the first principles, the first concepts of the intellect, according to the realistic scheme, may not have been known. Consequently, we emphasise that sensation is not the full possession of knowledge, but an essential part of the human cognition process. Through immediate perception of reality, it provides the intellect with raw materials for conceptualisation. Schematically we have:

38 The impressed species are regarded as representations because they "make present again" the item/s existing in the object to the knower. They are not photographic entities but immaterial representations of the form of the object to the knower. See H. Reith, *An Introduction to Philosophical Psychology*, 86.

39 *In II De Anima* lect. 24, n. 3: "Et per hunc modum, sensus recipit formam sine materia, quia alterius modi esse habet forma in sensu, et in re sensibili. Nam in re sensibili habet esse naturale, in sensu autem habet esse intentionale et spirituale."

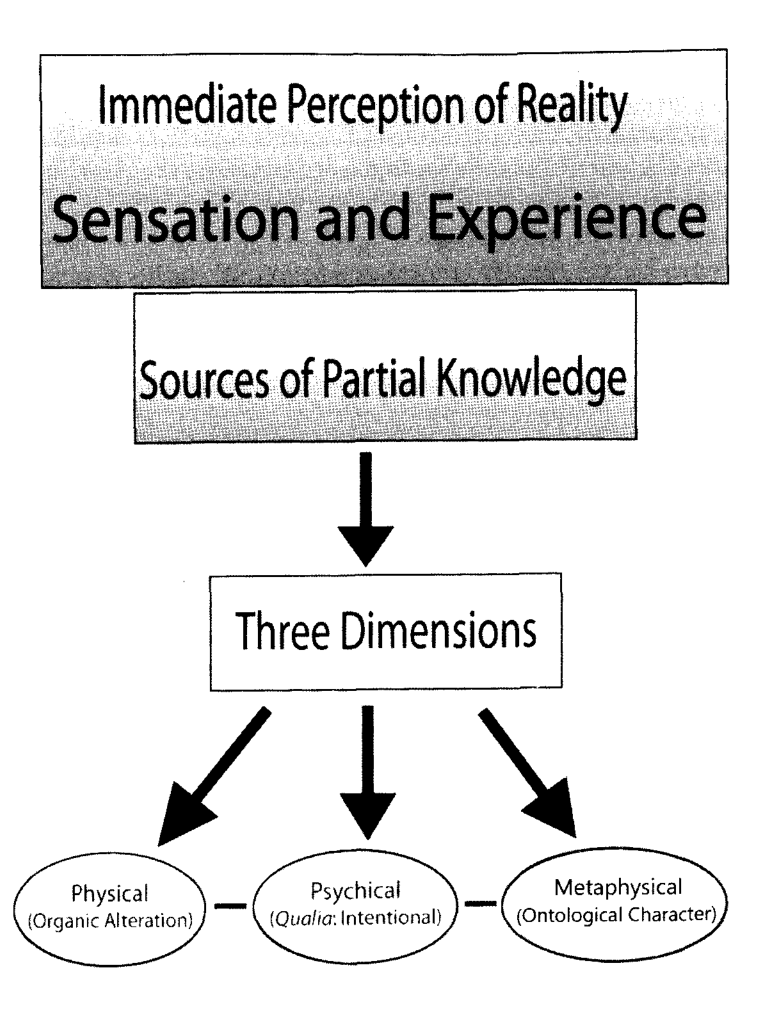



Figure 1.

### A.1.2 *Sensory Knowledge and Truth*

Inasmuch as sensory knowledge affords us some information, as we indicated above, it is not the end point of the cognitive process. In the Thomistic realistic model, sensation is the commencement of an extended procedure that culminates in the intellectual knowledge of intelligibles. This suggests that, as the starting point, sensory knowledge is incomplete. Even as the initial stage, sensory knowledge goes hand in hand with the concept of truth. The notion of truth, on the other hand, implies 'judgment' wherein affirmation and denial are made. Truth is fundamentally of the intellect, as we shall soon ascertain. This truth found in the human intellect is identified as 'logical truth', that is, the truth of *logos* understood as reason, word or discourse, which explains 'that' which the human



intelligence knows.[40] This is because Aquinas' structuring depicts this 'logical truth' as *adaequatio rei*, since truth is concerned not simply with essences but with the whole being. Aquinas establishes essentially that "truth is the equation of thought and thing" and this definition, according to him, is applicable to truth under any of its aspects.[41] The above-indicated notion of judgment corresponds to 'thought' while the 'thing' is the object of knowledge. And so, truth relates to the agreement between the mind's judgment and the objective thing being judged.

On the contrary, if thought were the key thing about truth, then sensory knowledge would be relative. However, this points to the fact that nothing, as such, is known in the human condition without the minimal application of thought. This further means that no sensible object is known even in the sensible state without the judgment of the mind. Any perceived thing that is so perceived entails a product of the mind's judgment. Thus, truth is found basically in the act of judgment and not in simple apprehension.[42] Considering the above-stated facts, one might ask if there is an import for the quest about truth in sensory knowledge. In our viewpoint, it is necessary to determine (at least by a word) whether the sensible knowledge conveys significant truth. This is because, in any reality, if the starting point is false, the *terminus* will be falsely judged. A lot is dependent on the sense data; for us, especially, to arrive at how the first principles are known, we should decipher truth in sensible knowledge. Strictly speaking, there is no objective judgment as regards sensible objects. Nonetheless, we can talk about the 'material truth' of perception. In this sense, acts, parallel to sensation and simple apprehension are true, as long as they are suitable, sensible, and intelligible representations of reality.[43] In some other respect, some representations may not be suitable for what is portrayed, and so fall short of the material truth in sensation.

However, any affirmation concerning a sensitive fact perceived by us presupposes an intellective-conceptual act connected to a sensation or perception. The fact that brute animals perceive colours or forms does not suggest that they can judge them as humans do. Their perception is limited only to a certain reaction when confronted with sensitive experience. And so, what we usually term 'sensible knowledge' is rather an integrated mental/physical operation between thought and sensation, that is to say, our intellectual interpretation of what we see, feel,

40 See L. Clavell, M. Pérez de Laborda, *Metafisica*, 211. Truth herein is not the kind of truth which belongs to the part of philosophy known as Logic. Instead we imply a truth that is 'one' with other properties such as 'knowability' by man, 'indivisibility', 'immutability', and 'absoluteness'.

41 *ST*, I, q. 16, a. 1: "Quod autem dicitur quod veritas est adaequatio rei et intellectus potest ad utrumque pertinere."

42 See J. Owens, *An Elementary Christian Metaphysics* (Milwaukee: Bruce Publishing Company, 1963), 248.

43 See P. G. Horrigan, *Epistemology: An Introduction to the Philosophy of Knowledge* (New York: iUniverse Inc., 2007), 133.

and perceive. This type of (sensible-intellectual) knowledge, as we noted in the preceding discourse, is basic to all others, hence, also, fundamental to us. This is due to the fact that sensible things or objects as they exist, take priority over anything of which we could really possess knowledge in reality.[44] In addition, it is through this judgment-based confirmation that we affirm the existence of the world and our own being, that is, the first necessary affirmation in reality. As Aquinas agreeing with Aristotle points out, "properly speaking, it is neither the intellect nor the sense that knows, but man that knows through both – as is clear..."[45] Our argument for the description of things known takes the form of what we touch or see or perceive. However, Aquinas himself explicates:

> For we say that man sees with the eye, and feels with the hand, ... We may therefore say that the soul understands, as the eye sees; but it is more correct to say that man understands through the soul.[46]

Hence, although there are limitations in objectivity to the information provided by the senses, nonetheless, the fact about sensible-knowledge has a real touch of truth. The errors of judgment in perception can result from deficiency in the interpretation of the data supplied by the senses and other contributory factors. The mind works with the data provided from the sensible experience. Consequently, even if complex 'psychoneural' processes mediate our 'sensible-intellectual' reading, for us the end product is the paradigm of an immediate knowledge. So, our natural cognition in the realistic scheme does not require an exertion of mediated reason because they are not and will not be inferential.[47]

The problem of the possibility of error in sensation can be caused by several other reasons: some objects can manifest themselves poorly to the senses for the sensible-intellectual reading. There can also be a true manifestation but with a deceptive reading through the senses like the snow that covers the water surface seems true solid while in actuality it is not.[48] There are myriads of instances but the fact remains that they affect objective judgment and perception of a thing. Perhaps subsequent similar sense experiences could help for the correction of the judgment (but that falls short of our examination here). Therefore, the measure of *adaequatio* of the perceptive representation is not static, but all these problems lead to and constitute the 'errors of senses'. Hence, we assert that although the

44 See J. Owens, *An Elementary Christian Metaphysics*, 227.

45 *De Ver*, q. 2, a. 6, ad 3: "Non enim, proprie loquendo, sensus aut intellectus cognoscunt, sed homo per utrumque, ut patet in I de anima."

46 *ST*, I, q. 75, a. 2, ad 2: "Dicimus enim quod homo videt per oculum, et palpat per manum, ... Potest igitur dici quod anima intelligit, sicut oculus videt, sed magis proprie dicitur quod homo intelligat per animam."

47 See J. J. Sanguineti, *Introduzione alla gnoseologia*, 67–69.

48 See J. Owens, *An Elementary Christian Metaphysics*, 248.



senses offer crucial material to the intellect and that sensible knowledge is not simply a product of the senses, they also err as the senses are affected more often by appearances rather than facts of true judgment. Their *adaequatio rei* is on the preliminary level to suffice for an objective affirmation in cognition.

Conclusively, we can assert that there is no 'sensory-intellective' knowledge without that which is rooted in the sensory experience. Thus, the sensory cognition carries some basic truths with it. According to Aristotle, our intellect remains a *tabula rasa* in the absence of sensory knowledge. The assurance of the 'physical presence' enables us (our minds) to determine the presented data. The said physical presence of an object grasped by the senses acts as an impetus to the intellect to attain certitude in its conclusion. Hence, the certainty of the content of sensory knowledge, despite errors, informs and fortifies the intellectual knowledge of any intelligible reality.[49]

### *A.2 Simplex Apprehensio: Intellectus (Nous)* vs *Ratio (Logos)*

We come to the verification of the apprehension of the first principles. We made the cursory tour of general apprehension with an accent to the sensible-intellective cognition to allow us a proper entrance into this principal argument as well as the subsequent ones. As we saw and hope to still decipher, knowledge fundamentally touches the core of being. Given the indispensable character of knowledge to the human nature, we affirm simultaneously the necessity of the manner in which the ontological principles are known. Since every human person employs correctly the first fundamental metaphysical principles, it is incumbent on us in the realm of speculative philosophy to examine the means by which these principles are apprehended.

Aquinas does not dedicate a separate and specific treatment to the cognitive source of the first principles or to being, the first concept of the mind. Be this as it may, this is characteristic of Aquinas' approach. However, through an analysis of portions of his submissions on being and first principles, we wish to get to a concrete and holistic insight into the argument. The human knowledge of the first principles in reality functions in the same modality as the knowledge of the first concept of the mind. This first notion obviously is the concept of 'being' as individualised in the essence through sensation.[50] How does this first apprehension of *ens* occur to the mind? The argument stems from and hinges greatly on the activities of the mind through the notions of *simplex apprehensio* and *judicium*. In an attempt to interpret Aquinas properly, there are various positions of Thomists on this question that we will examine shortly. Hopefully, that will help us to come to a better appreciation of the polemics.

49 See H. Reith, *An Introduction to Philosophical Psychology*, 97.

50 See *ST*, I, q. 84, a. 7.

### A.2.1 An Epigrammatic on the Thomistic Analysis concerning the two Intellective Powers

Prior to our investigation of the human intellect's apprehension of the first principles, we take a look at Aquinas' notion of the intellect. The Thomistic structure about the intellect largely flows from and develops the Aristotelian notion of the *nous*. As we mentioned in our first chapter, Aristotle considers *nous* as the highest intuitive capacity that grasps the first principles through the notion of induction (*epagôgé*).[51] Most prominent Aristotelian scholars like Lee,[52] Irwin,[53] Ross,[54] and Grene[55] underline the essence of *nous* in the realistic context to demonstrate the importance Aristotle attaches to the role of *nous* in the knowledge of first principles. Just like Aristotle, Aquinas also considers the intellect not as a faculty, but as a way of knowing, opposed to *ratio*. According to Aquinas, the intellect is an essential entity for the knowledge of the first principles. In the Thomistic context, the intellect plays a major role in the mentioned cognition of the first principles; in fact without the intellect, *ens* or *prima principia* will be incommunicable. Our study herein of the dual facets of the human mind, namely, *intellectus* and *ratio* will help us arrive at a better appreciation of the actual import of the human soul.

The human intellect is neither just a simple generic perception nor a mysterious intuition as some (frequently) have mistakenly interpreted it. Likewise, the human *ratio* is not a prevalently formal entity that only systematically organises and synthesises the intuitive data to make it manageable in the diverse

51 See Murat Aydede, "Aristotle on Episteme and Nous: the Posterior Analytics," (A Revised and Longer version of a paper in *Southern Journal of Philosophy* 36 (1998), 15–46; "Aristotle on Episteme and Nous: the Posterior Analytics," in <http://faculty.arts.ubc.ca/maydede/Aristotle.pdf>, accessed June 2011. "Aristotle introduces *nous* as an intuitive faculty that grasps the first principles once and for all. … Aristotle repeatedly tells us that we acquire knowledge of first principles through an inductive process (*epagôgé*) starting from sense-perception. … he introduces in the famous passage (100b5–17), as the orthodox interpretation has it, the most accurate and infallible intellectual faculty of man, *nous*, by which, Aristotle says, we grasp, once and for all, the ultimate and necessary first principles as such. … That is, *nous* can be seen both as the (only) justificatory source and as the psychological mechanism helping the induction from particulars." See also *APst*, 100b 3–4.

52 See H. D. P. Lee, "Geometrical Method and Aristotle's Account of First Principles," 113–124 esp. 122.

53 See T. H. Irwin, *Aristotle's First Principles*, 135. "Aristotle says the first principles are grasped by 'intellect' or 'understanding', *nous* (100b 5–17). *Nous* of first principles must be aware of the principles as true, primary, and best known. … His remarks about *nous* and about the cognitive status of first principles show that he sees what he is committed to, and thinks he can accept the consequences. Not surprisingly, both induction and *nous* are mentioned in the answer; … Aristotle insists strongly on the natural priority of the propositions grasped by *nous*."

54 See W. D. Ross, *Aristotle* (London: Methuen & Co. Ltd., 1945), 217.

55 See M. G. Grene, *A Portrait of Aristotle* (Chicago: Chicago University Press, 1963), 112. "The refinement of perception to make explicit the universal in the individual, the species in the specimen: this is the experience that underlies Aristotle's confidence about *nous*."



operative functions of thought. This kind of understanding portrays the mental human construct merely as a separated unit relegated to the formal realm of a link for material sensible or empirical data processing. Further, the human mind does not also imply the sort of sensible perception of the late scholastics' notion in the distinction between abstractive and intuitive cognition (as in Ockham) and the Kantian interpretation of intuition as (*Verstand*) involving categories in sensible perception.[56] The 'double-sided' human mental capacity is rather an ontological complex whole that involves an intrinsic unity.

The Thomistic notion of intuition has an intellectual connotation rather than just an empirical one. As Sanguineti suggests, Aquinas' idea of intuition is analogically parallel to the interior vision as sight is for the external senses, but not as a conceptual representation (mental word).[57] Aquinas does not visualise the intellectual intuition as a direct *a priori* penetration into the essence of things in order merely that they be thought. However, for Aristotle as well as Aquinas, beyond simple nominal definition, real sensible experience brings about a true grasp of the actual signification or the *quod quid est* of the intelligible content of the defined entity.[58] Taking, for instance, Aquinas' objective definition: "It is called understanding (*intellectus*) because it reads (*legit*) within, observing the essence of a thing."[59]

Hence, we have a glimpse into the real significance of the nature of intellect. Further, this perception of the intellect is not equated to an intellective formal function as a unification of multiple empirical contents; rather it is an intellective act with intelligible content.

In Aquinas' realistic perspective, the intellect is contrasted on one side with *ratio*, and with sense perception on the other. The intellect is higher than the sensitive knowledge, which we discussed above, because it (the intellect) reads into (*intus legere*) and gets to intelligible interiority of the known entity. Hence, Aquinas submits:

> Understanding implies an intimate knowledge, for 'intelligere' (to understand) is the same as 'intus legere' (to read inwardly). This is clear to anyone who considers the difference between intellect and sense, because sensitive knowledge is concerned with external sensible qualities, whereas intellective knowledge penetrates into the very essence of a

56 See our first chapter for further discourse on this argument. We also examined therein certain empiricists' nuances.

57 See J. J. Sanguineti, "Los principios de la racionalidad en Santo Tomás," in *Espíritu* XLI (1992), 109–137, 110. With Sanguineti, we rule out the *a priori* positions, such as, Kantian gnoseological formalism with a Platonic tendency, where the intuition is viewed and taken away from the intelligible as (*noumeno*) through an abstract and unsullied thought.

58 See *ST*, II–II, q. 8, a. 1; *De Ver*, q. 1, a. 12.

59 *In VI Ethica*, lect. 5: n. 5: "Dicitur autem intellectus ex eo quod intus legit intuendo essentiam rei."

> thing, because the object of the intellect is "what a thing is." ... Now there are many kinds of things that are hidden within, to find which human knowledge has to penetrate within so to speak. Hence we may speak of understanding with regard to all these things.[60]

Aquinas denominates the foregoing *intellectus–sensus* distinction as a detection (catching) of the essence in the sensible. There is, in this relation, a causal relation in the effect, the meaning in the linguistic sign, and truth in the symbol. This is to say that it is worthwhile to consider as *intelligere* any elevation of the sensible into the intelligible. There is a fundamental (psychological) difference between the Platonic and Aristotelian structure herein. While Platonism excludes sensitive data for the acquisition of this 'understanding', the Aristotelian-Thomistic arrangement retains that sensible perception is second to none for this 'understanding' even when it is considered immediate. Thus, the Angelic Doctor pointing to Plato's errors observes:

> Plato, on the other hand, held that the intellect is distinct from the senses: and that it is an immaterial power not making use of a corporeal organ for its action. And since the incorporeal cannot be affected by the corporeal, he held that intellectual knowledge is not brought about by sensible things affecting the intellect, but by separate intelligible forms being participated by the intellect, ... Moreover he held that sense is a power operating of itself. ..., the result being that the soul is in a way roused to form within itself the species of the sensible. ... Thus according to Plato, neither does intellectual knowledge proceed from sensible knowledge, nor sensible knowledge exclusively from sensible things.[61]

The 'intellect proper'[62] is also different from reason because while *ratio* arrives at contents discursively and with time, in the course of grasping certain relations within immediate knowledge, the intellect understands a unitary content (simple or complex) immediately.[63] On this view the Angelic Doctor asserts: "The discourse of reason always begins from an understanding and ends at an understanding; because we reason by proceeding from certain understood principles."[64] This is because *ratio* by its nature always implies a processing of the thing holistically grasped. Regarding the *intellectus-ratio* combination, the first term, intellect, signifies immediateness and a direct gaze. This means an intuitive apprehension of the intelligible truth[65] or the intelligible content present to the intelligence.[66] On the other hand, *ratio* is the "intellectual movement" or procedure from one act to the other. Hence, Aquinas portrays reason, as follows:

> And to reason is to advance from one thing understood to another, so as to know an intelligible truth. Reasoning, therefore, is compared to understanding, as movement is to rest, or acquisition to possession; of which one belongs to the perfect, the other to the imperfect.[67]

Reason is not a psychical force but the mind's judgment-based endeavour to arrive at some new terms previously unknown, because the mind grasps in the former the relation that brings it to the latter. Consequently, in the Thomistic notion, the intellect, as such, is a contemplative repose within the contemplated, while *ratio* is a movement (*motus*) between the contemplated for the reason that one leads to the other.

### *A.2.2 Nous considered as Judgment in Aquinas*

As we briefly highlighted above, in Aquinas, intellection (*intelligere*) is not always a simple apprehension that is assimilative of some contents. The Thomistic generic definition in the *Commentary on the Sentences* shows that *intelligere* is a simple intuitive understanding or intuitive vision of the 'subject matter' as an intelligible presence.[68] Nonetheless, that is a sort of cliché in Aquinas. This is because very often the Angelic Doctor typifies the grasped object not merely phenomenologically but in a truthful way, demonstrating that *intelligere* (to

60 *ST*, II–II, q. 8, a. 1: "Nomen intellectus quandam intimam cognitionem importat, dicitur enim intelligere quasi intus legere. Et hoc manifeste patet considerantibus differentiam intellectus et sensus, nam cognitio sensitiva occupatur circa qualitates sensibiles exteriores; cognitio autem intellectiva penetrat usque ad essentiam rei, obiectum enim intellectus est quod quid est. ... Sunt autem multa genera eorum quae interius latent, ad quae oportet cognitionem hominis quasi intrinsecus penetrare. Unde respectu horum omnium potest dici intellectus." See also *De Ver*, q. 1, a. 12.

61 *ST*, I, q. 84, a. 6.

62 Since the intellect is a double-faceted entity, we use 'proper' herein to qualify the aspect of the intellect that is characterised mainly by intuitive insights in order to strike a difference between them. Aquinas also sometimes uses the terminology distinctly or in a generic mode with explications. See *ST*, I, q. 79, a. 8 and 10.



63 See J. J. Sanguineti, "Los principios de la racionalidad en Santo Tomás," 109–137, 112.

64 *ST*, II–II, q. 8, a. 1, ag 2: "Ad secundum dicendum quod discursus rationis semper incipit ab intellectu et terminatur ad intellectum, ratiocinamur enim procedendo ex quibusdam intellectis."

65 *ST*, I, q. 79, a. 8: "Intelligere enim est simpliciter veritatem intelligibilem apprehendere."

66 *In I Sent*, d. 3, q. 4, a. 5: "Intelligere autem dicit nihil aliud quam simplicem intuitum intellectus in id quod sibi est praesens intelligibile."

67 *ST*, I, q. 79, a. 8: "Ratiocinari autem est procedere de uno intellecto ad aliud, ad veritatem intelligibilem cognoscendam. ... ratiocinari comparatur ad intelligere sicut moveri ad quiescere, vel acquirere ad habere, quorum unum est perfecti, aliud autem imperfecti."

68 See *In I Sent*, d. 3, q. 4, a. 5.

understand) is just to apprehend intelligible truth;[69] and again, it is to adhere with some kind of approval to that which is judged.[70] Further, on the question, Aquinas suggests that 'intelligence' is that act for which the mind first of all apprehends something.[71]

A problem arises herein considering, in general terms, the fact that the foregoing idea is somewhat concealed by the reality surrounding the first mental operation which is also in accordance with Aquinas' notion. This is in view of the fact that the first mental operation or *simplex apprehensio* goes simply with the essence without existential values. Besides, only the second operation, that is judgment affirms the existence and the non-existence of the contents grasped from the concept. As such, only judgment, then, comprises the relation of truth and/or falsity, while the concept has neither true nor false value contents. If that holds, the question may immediately arise concerning 'what' confers the authority on judgment to introduce and add to the concept a reference to the existential reality. As Sanguineti suggests, the probable response could be that the concept implicitly entails the existence of the intentional object of the concept. Or further, the concept might translate into (be found in) existence only if it is associated with proper experience through conversion to phantasms.[72]

This kind of interpretation can be established on the aspects of Thomistic submission that deal with and sharply distinguish between the moment of apprehension and that of judgment referred to as that which is gained or received through representation.[73] Nevertheless, it appears natural to distinguish between the comprehension of the propositional significance and the judgment of its verity. Accordingly, Aquinas upholds:

> Now, when a man, by his natural reason, assents by his intellect to some truth, he is perfected in two ways in respect of that truth: first, because he grasps it; secondly, because he forms a sure judgment on it.[74]

However, it is worthwhile to note here that, in the Thomistic analysis, the moment of judgment is very often linked to the light of human intelligence interpreted diversely from different perspectives; for instance, it is regarded as the light of 'agent intellect' and of the first principles in the Aristotelian-Thomistic

69 See *ST*, I, q. 79, a. 8.
70 *ST*, I, q. 79, a. 9 ad 4: "Intelligere autem est cum quadam approbatione diiudicatis inhaerere."
71 See *ST*, I, q. 79, a. 10 ad 3.
72 See J. J. Sanguineti, "Los principios de la racionalidad en Santo Tomás," 109–137, 112–113.
73 *ST*, II–II, q. 173, a. 2: "Circa cognitionem autem humanae mentis duo oportet considerare, scilicet acceptionem, sive repraesentationem rerum; et iudicium de rebus praesentatis."
74 *ST*, II–II, q. 9, a. 1: "Cum autem homo per naturalem rationem assentit secundum intellectum alicui veritati, dupliciter perficitur circa veritatem illam, primo quidem, quia capit eam; secundo, quia de ea certum iudicium habet."



approach.[75] This is to say, that light of the intellect that helps the mind to judge, which also corresponds to the operation of the human mind that we regard as 'intellect'.[76] In addition, the human intellectual operation takes place in two ways, namely, through the intelligible light and through the intelligible species. The apprehension of things is acquired through the species, and the judgment of the apprehended (*judicium de apprehensis*) is performed through the intelligible light.[77]

Moreover, in Aquinas we understand implicitly that what actually matters in knowledge is not necessarily the representation but the judgment. This implies that while we think without judgment, we understand nothing, as such. This means that even when one is in a semi-conscious state, like sleep (as well as in non co-ordinating conditions like insanity or psychosis), one can have intellectual perceptions and reasoning without judging them and these are not considered 'actual knowledge'. The reason is that the sense of reality is lost to the person in such condition. In this articulation, we keep in sight the two essential acts of the intellect: namely, perception and judgment of the perceived reality. And so, the act of sleep, so to say, does not remove the intellectual activity, it only limits its activity to a non-judgmental condition. By so doing, whoever is asleep cannot 'know' in the actual sense of the term. Hence, Aquinas affirms:

> This is because the intellect has two operations, perceiving and judging about what it has perceived. In sleep the intellect is not prevented from perceiving something either from what it has previously considered (and this is why a man sometimes makes syllogisms in his sleep) or from illumination by some higher substance. ... But the perfect judgment of the intellect cannot be found in one who is sleeping, because at that time our senses, which are the primary source of our knowledge, are inhibited.[78]

75 We shall not treat the argument on the 'agent intellect' here because of its vast nature that merits an extensive discourse. We shall suspend it till the next chapter for the purpose of appropriateness in our scheme.
76 *ST*, II–II, q. 173, a. 2: "Iudicium autem humanae mentis fit secundum vim intellectualis luminis." The representation solely requires the presence of the intelligible species still without the intervention of the light.
77 *De Malo*, q. 16, a. 12: "Intellectualis hominum operatio secundum duo *perficitur*; scilicet secundum lumen intelligibile, et secundum species intelligibiles; ita tamen quod secundum species *fit* apprehensio rerum; secundum lumen intelligibile perficitur iudicium de apprehensis." [Emphasis added]. (The appearance of the species herein is articulated with the verb *fit* whereas *perficitur* is utilised to underscore the act of judgment, which makes the role of perfection of that act more explicit. Justifiably according to Sanguineti, the contemporary linguistic distinction between a simple linguistic expression and linguistic act corresponds to those of the species and judgment; that is to say, judgment verbally manifested, in fact, is a true linguistic act, which purposefully employs the expression in any of its varied usages).
78 *De Ver*, q. 28, a. 3, ad 6: "Ad intellectum duo pertinent: scilicet percipere, et iudicare de perceptis. Intellectus autem in dormiendo non impeditur quin aliquid percipiat, vel ex his quae

Aquinas, therefore, confirms that sleep is an unusual situation for the normal functioning of the human mind in regard to real judgments, the formulation of actual hypotheses, examination of views, and so on. In other words, the person in a sleep condition or a lunatic is deprived of the use of right reasoning for the investigation of truth and falsity. Freedom, as a result, is inhibited in such conditions. And so, as Sanguineti suggests, judgment is implicit in thought processes even when incomplete by way of an overall affirmation of truth.[79] This is because any thought hatched without an implicit judgment signifies an anomaly and an aberration in the person.

It is obvious through the preceding that, faced with reality, the Angelic Doctor, in one way, distinguishes between the condition of the intellect in connection with representation related to the essence of things and, in another, the judgmental situation of 'being' parallel to the articulated essence. Consequently, we reaffirm that the Thomistic notion of the intellect in its holistic form is a judgmental capacity in accordance with reality. In view of this analysis, we shall now examine the holistic Thomistic intellectual operational perspective.

### *A.2.3 The Thomistic Intellectual Operations and the First Cognitive Act*

At this point, it is essential to catalogue Aquinas' traditional three intellectual operations. We anticipate that this attempt will facilitate the task for us. Just as we partially portrayed above, there are thematically three intellectual operations in Aquinas. Commenting on Aristotle, Aquinas affirms that in an effort to know, there are three levels of intellectual operations involved. The first is called the understanding of the indivisibles; in this case, the intellect apprehends the essence of a thing in itself. The next concerns the intellect's act of combination and division.[80] The third operation pertains to reasoning through which reason proceeds from the known things in search of the unknown.[81] Although the human intellect

prius consideravit, unde, quandoque homo dormiendo syllogizat; vel ex illustratione alicuius substantiae superioris, ... Sed perfectum iudicium intellectus non potest esse in dormiendo, eo quod tunc ligatus est sensus, qui est primum principium nostrae cognitionis."

79 See J. J. Sanguineti, "Los principios de la racionalidad en Santo Tomás," 109–137, 114.

80 *In VI Metaph*, lect. 4: Cum duplex sit operatio intellectus: una, qua cognoscit quod quid est, quae vocatur indivisibilium intelligentia: alia, qua componit et dividit: in utroque est aliquod primum: in prima quidem operatione est aliquod primum, quod cadit in conceptione intellectus, scilicet hoc quod dico ens; nec aliquid hac operatione potest mente concipi, nisi intelligatur ens. Et quia hoc principium, impossibile est esse et non esse simul, dependet ex intellectu entis, sicut hoc principium, omne totum est maius sua parte, ex intellectu totius et partis: ideo hoc etiam principium est naturaliter primum in secunda operatione intellectus, scilicet componentis et dividentis. See also *ST*, II-II, q. 83, a. 1, ag 3.

81 *ST*, I, q. 85, a. 5: Et secundum hoc, necesse habet unum apprehensum alii componere vel dividere; *et ex una compositione vel divisione ad aliam procedere, quod est ratiocinari.* [Emphasis mine]. See also V. T. Bourke, ed. and trans. gen. intro. *The Pocket Aquinas* (New York: Washington Square Press, Inc., 1960), 14–15.



is an entity, the three distinct operations are in it and are interrelated like three in one. Without reducing the Trinitarian unity to the human category, we take a leap to view these operations with that lens. The operations, as it were, can be paralleled to the Trinitarian triad; the obvious difference is that the intellective triadic operations are on an unequal existential level but they always stem from one entity.[82] In these triadic intellectual operations, the notion of the centrality of participation in Aquinas' metaphysics, already accentuated in the previous chapter, is evident.[83] Obviously, in this triadic circle (mechanism), another crucial aspect of Thomistic metaphysics, 'synthesis' and 'analysis', is manifest.[84] Let us now examine the operations in detail.

Aquinas likens the human intellect (*intellectus intuitivus*) at the first level of operation to the divine and angelic.[85] At this level, the human intellect possesses a kind of cognition we could identify as unprocessed, imperfect, general knowledge. On this sort of intellective knowledge, Aquinas says:

> The human intellect does not acquire perfect knowledge by the first act of apprehension; but it first apprehends something about its object, such as its quiddity, and this is its first and proper object; ... But the angelic and the Divine intellect, like all incorruptible things, have their perfection at once from the beginning. Hence the angelic and the Divine intellect have the entire knowledge of a thing at once and perfectly.[86]

The above-cited Thomistic excerpt brings to the fore the idea that the initial human apprehension is, as it were, indistinct but necessary for further cognizance. It is a kind of *prima facie* level, which introduces the mind to its actual elaboration. Nonetheless, for the angelic and divine intellect, it is different in the sense that it is the moment of real knowledge. Contrary to human nature, the former have no need of processing knowledge because of their characteristic nature of direct intuition.[87]

82 See *ST*, I, q. 79, a. 8.

83 See our discourse on *First Principles Involving Participation*. The notion of participation herein underscored is evident in the three-in-one pattern, i.e., the three operations participate distinctly in the oneness of the holistic entity, *intellectus*.

84 *ST*, II-II, q. 83, a. 1, ag 3: "Duas operationes intellectivae partis, quarum prima est indivisibilium intelligentia, per quam scilicet apprehendimus de unoquoque quid est; secunda vero est compositio et divisio, per quam scilicet apprehenditur aliquid esse vel non esse. Quibus tertia additur ratiocinari, procedendo scilicet de notis ad ignota."

85 See *De Ver*, q. 16, a. 1.

86 *ST*, I, q. 85, a. 5: Et similiter intellectus humanus non statim in prima apprehensione capit perfectam rei cognitionem; sed primo apprehendit aliquid de ipsa, puta quidditatem ipsius rei, quae est primum et proprium obiectum intellectus; ... Intellectus autem angelicus et divinus se habet sicut res incorruptibiles, quae statim a principio habent suam totam perfectionem. Unde intellectus angelicus et divinus statim perfecte totam rei cognitionem habet.

87 See *ST*, II–II, q. 49, a. 5, ad 2.

This implies that, in God and the angelic creatures, the moment of perfect knowledge is identifiable with *simplex apprehensio*, which is simultaneously immediate 'judgment' (not syllogistic but *tanquam judicans*) within the same intuition.[88] As Sanguineti confirms, unlike the rational being (*essere*), the judgment of these spiritual entities is not a form of *compositio*.[89] On the other hand, this moment is equated to the instant of *simplex apprehensio* in the human context with which most philosophical erudite scholars grapple. Most agree on *simplex apprehensio* but differ on the mechanism of this understanding. Does the instantaneous appreciation involve judgment, or is it just 'simple' as the term implies? We shall ascertain this fact subsequently. And so, in order to have a full grasp of the idea of the first operation in Aquinas, we shall examine other Thomistic submissions in this regard.

In fact, in one of his most cited texts on the argument, Aquinas maintains that, in an attempt to form the essences, the intellect has just a likeness of the existing thing outside the soul, but not when it judges about the thing. Thus, Aquinas asserts:

> In forming the quiddities of things, the intellect merely has a likeness of a thing existing outside the soul, as a sense has a likeness when it receives the species of a sensible thing. But when the intellect begins to judge about the thing it has apprehended, then its judgment is something proper to itself--not something found outside in the thing. And the judgment is said to be true when it conforms to the external reality. Moreover, the intellect judges about the thing it has apprehended at the moment when it says that something is or is not. This is the role of "the intellect composing and dividing."[90]

The preceding simply designates the level of essences as a non–reality; it is a sort of an immediate mental passage in the consciousness of the mind. Aquinas himself demonstrates that the human mind, in getting to know, "inasmuch as it judges about things, is not acted upon by things, but rather, in a sense, acts."[91] If the soul acts upon things in grasping their contents, it is judging and not 'simply

88 See *SCG*, I, Ch. 57, n. 11: "Tum ex hoc quod inconveniens forte aliquibus videretur si deus syllogizare non posset. Habet enim syllogizandi scientiam tanquam iudicans, et non sicut syllogizando discurrens."

89 See J. J. Sanguineti, "Los principios de la racionalidad en Santo Tomás," 109–137, 121.

90 *De Ver*, q. 1, a. 3: "Intellectus autem formans quidditatem rerum, non habet nisi similitudinem rei existentis extra animam, sicut et sensus in quantum accipit speciem sensibilis; sed quando incipit iudicare de re apprehensa, tunc ipsum iudicium intellectus est quoddam proprium ei, quod non invenitur extra in re. Sed quando adaequatur ei quod est extra in re, dicitur iudicium verum; tunc autem iudicat intellectus de re apprehensa quando dicit aliquid esse vel non esse, quod est intellectus componentis et dividentis."

91 *De Ver*, q. 1, a. 10: "Anima vero in quantum de rebus iudicat, non patitur a rebus, sed magis quodammodo agit." [Trans mine].



apprehending' the things, since apprehension suggests its opposite. However, this judgment is an action about the things without affecting the things that are judged. Through this Thomistic insight, we recognise that the soul, so to say, is 'action' and not 'passion',[92] because the feature in 'judgment' that is not in the 'thing' is the implemented comparison that the intellect makes between itself and reality. The maturity of this kind of opinion comes with profound reflection, as it is tacit in the Thomistic proposal.

In view of the above, we come to the explication that, as somewhat earlier stated, on the first apprehension rests the substantiation that *ens* and the first principles can only be known instantly in an imprecise manner in the first apprehension of the mind. What happens at this stage of awareness to the mind is simply a vague realisation of 'what' as Aquinas affirms in the above citation.[93] It is like a sudden (immediate) awakening to something we could term an analogical equivalence to the instance of an individual's direct consciousness, which is still hazy.

However, considering the foregoing proposal of Aquinas, we infer that, although Aquinas does not explicitly mention judgment at the first instance of knowledge, it is implicit. Since this stage is at the level of essences, the mind realises a non-fully articulated knowledge, as we shall discover shortly. As Aquinas likens this stage of human understanding to the angelic or divine, it demonstrates further the existence of judgment at this level, which is immediate. We suggest this because, for the divine and the angelic, simplicity and immediacy in the act of knowledge of any reality are also simultaneously instantaneous and an existential act of immediate judgment – a fact that basic knowledge is an act of grasping which involves basic judgment either implicitly or explicitly (unprocessed or processed). This is our modest personal analysis knowing that there are many variant views in interpreting Aquinas on this notion.

Subsequently, Aquinas underscores the differences between *intellectus* and *ratio,* which focuses mainly on the aspect of temporality. The intellect knows instantly what *ratio* knows with time because reason must necessarily proceed from an intelligible content to another content, and this happens even with judgment that precisely composes terms with another.[94]

Referring to the Thomistic notion of *ratio* as movement does not mean a sort of physical progressive movement but a transitional one from one intellective act to another. This kind of movement is uneven and can be instantaneous. However, the moment of the 'understanding' of an intelligible differs from another moment of a subsequent grasp. The reason is that the subsequent, Z, is seen from (*ex*) the first, Y. This is to say that there is a distinction between seeing an act in another and seeing it from (*ex*) another act. The actual difference lies in the preposition

92 See J. J. Sanguineti, "Los principios de la racionalidad en Santo Tomás," 109–137, 114.

93 See *ST*, I, q. 85, a. 5.

94 See J. J. Sanguineti, "Los principios de la racionalidad en Santo Tomás," 109–137, 118.

*ex*, because if a thing is seen in another (*aliquid in aliquo*), it remains the same, which defiles the name 'discursive knowledge'; but if seen from another, there is an ontological progression which conveys the idea of *ratio* (movement).[95] The intellect in this process moves towards one, and from this (*ex hoc*) reaches to another. This act involves a certain kind of discourse, as is evident in demonstrations wherein the intellect first falls upon the principles and from them arrives at conclusions.[96] Mediation is the rational tendency, in so far as there is a plurality of intellective acts because according to Aquinas:

> When, however, the knowing power is directed by the same act to the medium by which it knows and to the thing known, then there is no discursive process in knowing.[97]

Consequently, Aquinas shows through the above excerpt that the mind knows *per modum statim*, intuitively, and implies the need for *ratio* for the mind to arrive at its objective conclusions, discursively.

Considering the foregoing, we put forward that there is no distinction between *intellectus* and *ratio* at the level of faculty. Aquinas himself was aware of this fact. After some of his other reflections on *intellectus-ratio* he submits that reason and intellect in man are not distinct powers.[98] Further, according to Aquinas, reasoning is to proceed from one intellect to another in order to obtain certitude.[99] While *ratio* portrays the transition in the multiplicity of human intellective operations, *intellectus* combines the contemplative activity, which terminates in the repose of a new intelligible content.

Nonetheless, Sanguineti specifically observes that it is worthwhile to note that *intellectus* is not always a gaze on absolute contents, while *ratio* functions

95 See *ST*, II-II, q. 83, a. 1, ag 3: "Quibus tertia additur ratiocinari, procedendo scilicet de notis ad ignota."

96 See *De Ver*, q. 8, a. 15: "Differt autem cognoscere aliquid in aliquo, et aliquid ex aliquo. Quando enim aliquid in aliquo cognoscitur, uno motu fertur cognoscens in utrumque, sicut patet quando aliquid cognoscitur in aliquo ut in forma cognoscibili: et talis cognitio non est discursiva. ... Sed tunc dicitur aliquid ex aliquo cognosci, quando non est idem motus in utrumque; sed primo movetur intellectus in unum, et ex hoc movetur in aliud; unde hic est quidam discursus, sicut patet in demonstrationibus. Primo enim intellectus fertur in principia tantum, et secundario per principia fertur in conclusiones."

97 *De Ver*, q. 2, a. 3, ad 3: "Quando vero non alio actu fertur potentia cognoscitiva in medium quo cognoscit, et in rem cognitam, tunc non est aliquis discursus in cognitione."

98 *ST*, I, q. 79, a. 8: "Ratio et intellectus in homine non possunt esse diversae potentiae. Quod manifeste cognoscitur, si utriusque actus consideretur."

99 *ST*, I, q. 79, a. 8: "Ratiocinari autem est procedere de uno intellecto ad aliud, ad veritatem intelligibilem cognoscendam." *ST*, II–II, q. 8, a. 1, ad 2: "Discursus rationis semper incipit ab intellectu et terminatur ad intellectum, ratiocinamur enim procedendo ex quibusdam intellectis, et tunc rationis discursus perficitur quando ad hoc pervenimus ut intelligamus illud quod prius erat ignotum."



for the grasp of the relational aspect. In some cases, the task of reason is actually to know the network of relations between the absolute *res*, as in cause and effect, similarity and opposition, means and end, etc., hence, being able to supersede the limited scope of immediate knowledge and, above all, to transcend experience. However, the intellect can also contemplate some prime relations contained in the first notions, as in PNC, or that the whole is greater than the part, etc.[100]

Ultimately, the distinction between intuitive and discursive knowledge is fundamentally in the instantaneous character of *intellectus* as opposed to the temporality of *ratio*. Nonetheless, the source of this temporality in human thought is in the succession from one act to another, which originated from the inadequacy of the content of single intellective acts. Accordingly, Aquinas observes:

> Yet the need of reason is from a defect in the intellect, since those things in which the intellective power is in full vigor, have no need for reason, for they comprehend the truth by their simple insight, as do God and the angels.[101]

Additionally, the consideration of definite truth is an incomplete act of human intelligence. The human mind with its infinite potentiality is aware of the inadequacy of its abstract manner of thinking, which is a weak intellectual understanding mode. All the same, the understanding of truth remains the human proper act of intellect by its very nature. Hence, Aquinas says: "This word 'intelligence' properly signifies the intellect's very act, which is to understand."[102]

The foregoing grounds us in the main inquiry about the modality of the human mind's apprehension of the first principles. Aquinas reiterates in different passages that knowledge of first principles is part of the first act of the human intellect. For instance, Aquinas in saying that the intellect moves from the first principles 'simply understood' to reasoning, implies the first act, which we have already established as the *simplex apprehensio*.[103] This first instance of the intellectual operation, as Aquinas appositely proffers and as we mentioned above, is unprocessed and primitive. Nonetheless, it is a fertile ground from which the metaphysical knowledge of being (*ens*) and first principles grow to perfection. It

100 See J. J. Sanguineti, "Los principios de la racionalidad en Santo Tomás," 109–137, 120.

101 *ST*, II–II, q. 49, a. 5, ad 2: "Sed necessitas rationis est ex defectu intellectus, illa enim in quibus vis intellectiva plenarie viget ratione non indigent, sed suo simplici intuitu veritatem comprehendunt, sicut deus et Angeli."

102 *ST*, I, q. 79, a. 10: "Hoc nomen intelligentia proprie significat ipsum actum intellectus qui est intelligere."

103 See *ST*, I, q. 79, a. 8: "inde est quod ratiocinatio humana, secundum viam inquisitionis vel inventionis, procedit a quibusdam *simpliciter intellectis*, quae sunt prima principia." [Emphasis added].

is the level that Sanguineti fittingly regards as pre-conceptual or primordial.[104] It is primitive in that it is pre-scientific, since Aquinas asserts that "certain seeds of knowledge pre-exist in us."[105] The idea of 'pre-existence' in this discourse excludes an *a priorism* of the *primum cognitum intelligibile*. This is because through *intellectus* the sciences are born, which implies that *intellectus* is the principle of the sciences. Further, the reason for the imperfection of this phase is that it is found at the first operation of the intellect underscored in the categories above, namely, understanding of the indivisibles. Hence, Aquinas submits:

> Now it is evident that to know an object that comprises many things, without proper knowledge of each thing contained in it, is to know that thing confusedly. In this way we can have knowledge not only of the universal whole, which contains parts potentially, but also of the integral whole; for each whole can be known confusedly, without its parts being known.[106]

The preceding Thomistic citation confirms that human knowledge, at this level, is basic, without details, incomplete, indistinct, limited, and pre-scientific.

#### *A.2.4 The Complementarity between* Simplex apprehensio *and* Compositio/Divisio

Viewed from another aspect, irrespective of other contributory existential reality, the first operation, as seen in another popular Thomistic text regarding the nature (*quid est*) of a thing, is a mental separation (*abstractio*). In the same vein, the second can be considered as the receiver of the being of things (*respicit esse rei*).[107] In this passage, instead of the word *judicium*, Aquinas uses *compositio et divisio*, another term of Aristotelian background (that is *De Anima*), wherein the first mental operation is referred to as *intelligentia indivisibilium*.[108] On this

104 See J. J. Sanguineti, *Introduzione alla gnoseologia*, 181–186 esp. 186.

105 *De Ver*, q. 11, a. 1: "Quod praeexistunt in nobis quaedam scientiarum semina, scilicet primae conceptiones intellectus."

106 *ST*, I, q. 85, a. 3: "Manifestum est autem quod cognoscere aliquid in quo plura continentur, sine hoc quod habeatur propria notitia uniuscuiusque eorum quae continentur in illo, est cognoscere aliquid sub confusione quadam. Sic autem potest cognosci tam totum universale, in quo partes continentur in potentia, quam etiam totum integrale, utrumque enim totum potest cognosci in quadam confusione, sine hoc quod partes distincte cognoscantur." See also *ST*, I, q. 85, a. 4 & esp. 5.

107 See *In De Trin*, q. 5, a. 3: "Prima quidem operatio respicit ipsam naturam rei, secundum quam res intellecta aliquem gradum in entibus obtinet, sive sit res completa, ut totum aliquod, sive res incompleta, ut pars vel accidens. Secunda vero operatio respicit ipsum esse rei, quod quidem resultat ex congregatione principiorum rei in compositis vel ipsam simplicem naturam rei concomitatur, ut in substantiis simplicibus."

108 See Aristotle, *De Anima*, 430a 25–30.



mental composition of the conceived contents, although unstated, the existential level is assumed and implied, such that aspects that are not necessarily connected determine the operation. On the other hand, the abstraction cannot be established amidst the features only essentially linked.

The above stated fact is reflected in Fabro by his hypothesis on the Thomistic notion of intellectual abstraction. Accordingly, Fabro proposes that abstraction is the fundamental role of intelligence from which arises its first awakening and the presentation of the essential intelligible contents. He enunciates further that it belongs to the intellectual abstraction to bring about the contents and the relations which appertain to reality, as reality, – that is, *esse in quantum esse*.[109]

We see further a dual Thomistic notion of *abstractio*, which carries the import of complementarity in the first two intellectual operations in the knowledge of *ens* and similar notions. In the following excerpt, for instance, Aquinas says:

> Abstraction may occur in two ways: First, by way of composition and division; thus we may understand that one thing does not exist in some other, or that it is separate therefrom. Secondly, by way of simple and absolute consideration; thus we understand one thing without considering the other. ... Likewise, the things which belong to the species of a material thing, such as a stone, or a man, or a horse, can be thought of apart from the individualizing principles which do not belong to the notion of the species. This is what we mean by abstracting the universal from the particular, or the intelligible species from the phantasm; that is, by considering the nature of the species apart from its individual qualities represented by the phantasms. ... And so the intellect would be false if it abstracted the species of a stone from its matter in such a way as to regard the species as not existing in matter, as Plato held. ... For it is quite true that the mode of understanding, in one who understands, is not the same as the mode of a thing in existing: since the thing understood is immaterially in the one who understands, according to the mode of the intellect, and not materially, according to the mode of a material thing.[110]

109 See C. Fabro, *Percezione e pensiero* (Roma: Editrice del Verbo Incarnato, 2008), 329–332, esp. 329.

110 *ST*, I, q. 85, a. 1, ad 1: "Ad primum ergo dicendum quod abstrahere contingit dupliciter. Uno modo, per modum compositionis et divisionis; sicut cum intelligimus aliquid non esse in alio, vel esse separatum ab eo. Alio modo, per modum simplicis et absolutae considerationis; sicut cum intelligimus unum, nihil considerando de alio. ... Similiter dico quod ea quae pertinent ad rationem speciei cuiuslibet rei materialis, puta lapidis aut hominis aut equi, possunt considerari sine principiis individualibus, quae non sunt de ratione speciei. Et hoc est abstrahere universale a particulari, vel speciem intelligibilem a phantasmatibus, considerare scilicet naturam speciei absque consideratione individualium principiorum, quae per phantasmata repraesentantur. ... Unde falsus esset intellectus, si sic abstraheret speciem lapidis a materia, ut intelligeret eam non esse in materia, ut Plato posuit. ... Est enim absque falsitate ut alius sit modus intelligentis

The foregoing is a sort of recapitulation of our analysis of the human intellect's endeavour to know the first conceptions of the mind. According to Aquinas, the mind abstracts in two ways: a.) either by the complex mode through composition and division as is the case on the second level of operation of the intellect; or, b.) in *simplex apprenhensio* in the first concepts of *ens* and first principles (which is simple). The latter implies a direct incomplete intuition of the material sense data. Aquinas, in his ingenuity, knows that the simple level *per se* belongs to the spiritual entities (God and the angels); so, he continually lays emphasis on that which falls to the mind as a 'unity' or unrefined.

Considered this way, it might seem apparent that 'judgment' would fall exclusively into accidental unity, that is, only empirically verifiable, outside the circle of the Aristotelian conception of science. Nevertheless, Aquinas eventually acknowledges that to the second intellectual operation is markedly articulated the metaphysical endeavour, while abstraction is somewhat associated with the science of nature.[111] The most probable assumption herein about this Thomistic interpretation, as we accentuated above, is that Aquinas most often understands essence as the essence of sensible things and tries to determine the object of metaphysics according to the Aristotelian expressions of Boethius. It is worthwhile to remember that in the Thomistic context, both physics and mathematics consider solely mental abstract objects as non-real: their immateriality is only rational and not real, contrasted with the Platonic understanding that those objects are actually separate. Consequently, metaphysics is the only science with separable aspects as in 'being' or separate substances (like God) from sensible matter. Further, the text we are examining does not negate that natural sciences can accomplish judgment, but only that they (sciences, like physics and mathematics) are capable of arriving at 'thought', that is, immateriality, because of the abstractive character of the human knowledge; while metaphysics arrives at the natural or existential immateriality that, as such, is subject to 'judgment'. Platonism, on the other hand, separates in 'being' what is only separate at the operational level of intellect.[112]

Aquinas, on his part, was very specific, but subtle in his statements about this stage of the intellect's operation. However, he brings in immediately the second level of the human mind's operation, to demonstrate where real (explicit) division and judgment begin. This denotes a kind of implicit unification in the human condition between the first operation of the mind and the second, because the human intellect is not so pure or free of matter. Nonetheless, we bear in mind that the intellect through *simplex apprehensio* has a first instantaneous grasp of reality as

in intelligendo, quam modus rei in existendo, quia intellectum est in intelligente immaterialiter, per modum intellectus; non autem materialiter, per modum rei materialis."

111 See *In De Trin*, q. 5, a. 3.

112 See J. J. Sanguineti, "Los principios de la racionalidad en Santo Tomás," 109–137, 115.



*ens*, and the *principia prima* (whose model is the PNC), the tools with which to judge other realities in 'being'. However, as underscored above, in a brief commentary on Aristotle, Aquinas specifically says:

> We must realize that, ... the intellect has two operations: one called the "understanding of indivisibles," by which it knows what a thing is, and another by which it joins and divides, that is to say, by forming affirmative and negative statements.[113]

The preceding citation precisely summarises the argument in view. Aquinas underscores two aspects of the mind's activity that contemporary scholastic scholars could categorise as simple apprehension and judgment. In the *simplex apprehensio*, as Aquinas suggests, *ens* is apprehended indistinctly, as well as the PNC, in a primitive mode through the senses without 'explicit' judgment. Yet, this is non-existential; the act of being is incomplete. It can be said that through simple apprehension, the intellect simply knows 'what' without any affirmation and negation.[114]

Moreover, Aquinas, in the above extract, says that the two intellectual operations correspond to dual principles in realistic things. On this, Aquinas suggests that the first operation regards the nature of a thing by whose virtue the known object has a rank amidst beings (and that is where we locate *ens*). This is to say that *ens* is simply known by its *essence* here as 'that which is', and for the mind to make this simple accent is an implied judgment. Likewise, in the model of the principles, the PNC is a realisation made under this auspices without verbal articulation, since it is as yet pre-linguistic and underdeveloped. The second, Aquinas

113 *In De Trin*, q. 5, a. 3: "Oportet videre, qualiter intellectus secundum suam operationem abstrahere possit. Sciendum est igitur quod secundum philosophum in III de anima duplex est operatio intellectus. Una, quae dicitur intelligent indivisibilium, qua cognoscit de unoquoque, quid est. Alia vero, qua componit et dividit, scilicet enuntiationem affirmativam vel negativam formando."

114 See J. F. Wippel, *The Metaphysical Thought of Thomas Aquinas: from Finite Being to Uncreated Being*, 24. Wippel vividly explicates: "... By simple apprehension (which must not be confused with sense perception), the intellect simply knows what something is without affirming or denying anything of it." (*Ibid.* 24). Wippel further makes a substantial contribution to this debate in favour of minimal judgment by his second analysis of the *primum cognitum*. We may take this submission as a first stage of the development of his argument in favour of the involvement of judgment in the mind's first perception of being. He asserts: "On the contrary, what one first discovers through original judgments of existence can be summed up, as it were, under the heading being, or reality, or something similar. Once the intellect makes this discovery, it expresses it in a complex or notion, as 'that which is.' This, I am suggesting is what Thomas has in mind when he refers to being (*ens*) as that which is first known. Intellectual awareness of this presupposes both simple apprehension (the intellect's first operation) and judgment and, of course, sense experience." J. F. Wippel, *The Metaphysical Thought of Thomas Aquinas: from Finite Being to Uncreated Being*, 44.

suggests, is focussed on the *esse* of a thing. The second enunciated here does not essentially imply *ratio* but the activity of the intellect that belongs to *compositio et divisio*. The aforementioned *esse* is from the unification of the principles of a thing, if complex, or an accompaniment of the thing's simple nature, when simple.[115] The first level of the mind's operation is the actual reason whereby Aquinas himself likened the human intellect to the angelic or divine intellect. The character of the *statim* depicted here is usually with deficiency or unclarity; even when not specified, it is apparent. Though this level of human insight is close to the angelic, it falls short of the purity of the angelic and simplicity of the divine, that is why it is not existential. Hence, Aquinas in a number of passages resolutely notes the fundamental difference about them. The signification of 'simplicity' of intuition, as Sanguineti succinctly identifies, does not necessarily entail the intuited entity according to Aquinas' proposal.[116]

So far, we deduced that the first instance of knowledge is an unfinished and non-realistic intellectual act. It is the ingredient of the immediate comprehensive act of the intellect. The human simple apprehension, as it is called, is at the representational aspect of essence, that is, deprived of actuality in being. Besides, the simple apprehension, although unstated, is an implicit judgmental act which concludes at the *compositio et divisio*. This is where the true picture of the human comprehension of *ens* vividly comes out. And so, the realistic human endeavour to 'know' is a complementary act of *simplex apprehensio* through *compositio/divisio*. Hence, the acknowledgement of *ens* is in the act that is similar to the verbal act *Ego Sum*, so to speak, a complex. This complex is an exemplar of the Thomistic notion of *ens* that *aliquid est* (something is) is a fruit of intuition instructed by an implicit judgment. As Wippel suggests, what we discover through the innovative judgment of existence is being (*ens*) or something similar. As soon as the intellect understands this, it expresses it in a notion or complex: 'that which is'.[117]

Consequently, the first conceptions of the mind cannot be the 'real' product of *simplex apprehensio* as some Thomists mistakenly interpreted. Aertsen,

115 See *In De Trin*, q. 5, a. 3. Aquinas uses *esse* here in a loose sense because in another place he differentiates three shades of *esse* in his commentary on the sentences. There is an *esse* of the level of cognition, which he classifies as actual existence, another one he regards as the very nature and quiddity of a thing, and finally the *esse* that signifies the truth of composition, i.e. of judgment. See *In I Sent*, d. 33, q. 1, a. 1, ad 1.

116 *De Ver*, q. 2, a. 13: "Non potest dici discursus in scientia ex hoc quod duo videt, si illa duo uno intuitu videat; quod accidit in divina scientia, per hoc quod omnia per unam speciem videt."

117 See J. F. Wippel, *The Metaphysical Thought of Thomas Aquinas: from Finite Being to Uncreated Being*, 44. We quote him: "... what one first discovers through original judgments of existence can be summed up, as it were, under the heading being, or reality, or something similar. Once the intellect makes this discovery, it expresses it in a complex or notion, as 'that which is.'"



for instance, categorically affirms that there is no judgment implied in the first apprehension of *ens* as the existentialist Thomists suggest.[118] For him, the real articulation of the first concept of the intellect is in *simplex apprehensio*. He further thinks that, at this stage of *simplex apprehensio*, there is a unity of definition as in transcendental *unum*.[119] However, we know that the reality of our understanding is more complex than the pure immaterial exercise as Aertsen maintains.

Aquinas' insightfulness, therefore, is mostly felt herein because, among others, he demonstrates an acute ingenuity. It is amazing that a problem arises in this Thomistic proposal among renowned Thomists. We may attribute the mentioned problem to the Thomistic style of presentation. Later, we hope to study a few of the different perspectives, but let us first investigate another feature of the intellectual operations.

### *A.3 Abstractive Intuition*

Our preceding extensive discourse on the nature, operations, and cognitive modes of *intellectus-ratio*, serves as a lead to the present investigation. It necessarily paves the way for this aspect of our study on the intellectual operation, namely, abstractive intuition. This is the level of proper human knowledge, because of its objectivity in human cognition involving what Fabro calls *conversio* between the intellect and the senses.[120] It is the point of integration in human understanding, so to say, an intermediary between simple intuition and *ratio's* discursiveness. At this level, apart from the *primum cognitum*, propositional concepts and judgments are formed by the intellect.[121] It is, analogously, the heartbeat of the intellectual act. The 'conviviality' witnessed at this moment of the intellectual operations

118 See J. A. Aertsen, *Medieval Philosophy and the Transcendentals: The Case of Thomas Aquinas* (Leiden: E. J. Brill, 1996), 180. After his examination of the positions of various Thomists, Aertsen rounds off his views as follows: "Our conclusion is that the thesis of "Existential Thomism," that 'being' is attained only in judgment, the second operation of the intellect, is incorrect. 'Being' is attained in simple apprehension. The concept principally signifies "what has being," "what is," a phrase that does not entail a judgment." J. A. Aertsen, *Medieval Philosophy and the Transcendentals*, 180.

119 See J. A. Aertsen, *Medieval Philosophy and the Transcendentals*, 207.

120 See C. Fabro, *Percezione e pensiero*, 266–267. Fabro discusses this theme of *conversio ad phantasmata* in details in another work already cited herein: *La nozione metafisica di partecipazione*, 127–132. In the mentioned work, after Fabro made his interpretation of *abstractio* as the means through which the human intellect has access to the sensible through objectivisation facilitated by phantasm, he introduces *separatio* as a new metaphysical level. See Fabro, *La nozione metafisica di partecipazione*, 127–132, esp. 129.

121 See *ST*, I, q. 85, a. 5.

knits the intellectual operations into an intrinsic unity.[122] In a nutshell, Aquinas' subtlety on cognitive proposition is apparent. The key motif in this discourse can be clearly seen in the following Thomistic excerpt:

> The perfect act of the intellect is complete knowledge, when the object is distinctly and determinately known; whereas the incomplete act is imperfect knowledge, when the object is known indistinctly, and as it were confusedly.[123]

*A.3.1 The Comprehensive Nature of Second Intellectual Act*

The Thomistic doctrine of 'intuitive judgment' evidenced principally in the second intellectual operation is the act of the division and composition in which 'actual' human formulation of concepts occur.[124] However, there is a quandary about this fact. The metaphysical problem of Thomistic intellectual intuition amongst Thomist scholars is mostly identifiable in an attempt to assign divergent roles to the properties of the intellect. This problem can be minimised if one remembers that the intellect is an entity of many facets. The immateriality of its nature adds to the dilemma in the analysis of its functional progression.

*Intellectus*, therefore, is an existential[125] grasp that does not admit of rigid structures as in mathematics or modern physics. Although the notion of judgment goes with factual data, it functions differently with a spiritual dynamic entity as in the case of the human intellect. This does not dismiss the effort we made in the preceding study to interpret Aquinas accordingly. However, the human mind works well and understands better with distinctions, diverse functions, and concrete sense data because of its capacity to 'judge'. The core ingredient about the intellect's role is the discovery of truth. This truth is what we have rapidly accentuated as logical truth.[126] The intellect's discovery of this truth involves discernment (explicit judgment) of the mind, which is articulated principally at the second moment of the intellect's operation. This is the point where the mind's conformity with reality is fully actualised because at this level the mind is able

122 See J. J. Sanguineti, "Los principios de la racionalidad en Santo Tomás," 109–137, esp. 121–124 for more details on the intrinsic intellectual unity.

123 *ST*, I, q. 85, a. 3: "Actus autem perfectus ad quem pervenit intellectus, est scientia completa, per quam distincte et determinate res cognoscuntur. Actus autem incompletus est scientia imperfecta, per quam sciuntur res indistincte sub quadam confusione."

124 We make this accent on 'actual' to demonstrate that instantaneous knowledge of 'being' and 'first principles' is a fruit of *simplex apprehensio* according to human nature with implicit *judicium*.

125 We are not champions of Thomistic existentialism by our reference to an existential fact; we only made a realistic observation.

126 See our preceding consideration under Sensory Knowledge and Truth.



to make real distinctions to know things as they are and not as 'unity' like in the general obscure notion of *ens* and its like. The reason is, as Wippel well suggests, that the human mind cannot 'actually' abstract truth from *res* united in reality.[127] Rather, as shown in Aquinas, it goes by negative judgment or abstraction, a kind of separation or disentanglement of the complex whole.[128] How does this occurrence proceed in the human mind? An affirmation of the truth in reality is a progression of the intellect to the object in an attempt to know it. Hence, as we affirmed, knowledge is a conception (*conceptio*) of the intellect. The implication is that 'intellection' is the product of any human intellectual act of knowledge. On this, Aquinas appositely explicates:

> Now the one who understands may have a relation ... to his act of understanding, and to his intellectual concept. ... whereas the intellectual concept is only in the intellect. Moreover the intellectual concept is ordered to the thing understood as its end, inasmuch as the intellect forms its concept thereof that it may know the thing understood.[129]

This further entails the intellectually known (*ipsum intellectum*) and the conceived object as expressible in language.[130] Accordingly, Aquinas says, "This intellectual concept in us is called properly a word, because it is this that is signified by the word of mouth."[131] The intellectually 'conceived' is twofold, the simply formed as in an expression of the quiddity, such as, *ens* or *principia prima*, and the second type that is complex where the mind makes an explicit rational judgment as in composite and division (*compositum et divisum*). And so, this idea is well articulated in Aquinas, as follows:

127 See J. F. Wippel, *The Metaphysical Thought of Thomas Aquinas: from Finite Being to Uncreated Being*, 45.

128 See *In De Trin*, q. 5, a. 3: "Hac ergo operatione intellectus vere abstrahere non potest nisi ea quae sunt secundum rem separata, ut cum dicitur: homo non est asinus."

129 *De Pot*, q. 8, a. 1: "Intelligens autem in intelligendo ... ad suum intelligere, et ad conceptionem intellectus. Conceptio autem intellectus non est nisi in intellectu; et iterum conceptio intellectus ordinatur ad rem intellectam sicut ad finem: propter hoc enim intellectus conceptionem rei in se format ut rem intellectam cognoscat."

130 In the first instance of knowledge, when *ens* is seen simply as an unprocessed 'unit', it is a non-verbalised awakening (intuitive instance) that culminates in language and composition, 'that which is' or in the explicit judgment of being, "being cannot 'be' and 'not be' simultaneously."

131 *De Pot*, q. 8, a. 1: "Haec autem conceptio intellectus in nobis proprie verbum dicitur: hoc enim est quod verbo exteriori significatur: vox enim exterior neque significat ipsum intellectum, neque speciem intelligibilem, neque actum intellectus, sed intellectus conceptionem qua mediante refertur ad rem. Huiusmodi ergo conceptio, sive verbum, qua intellectus noster intelligit rem aliam a se, ab alio exoritur, et aliud repraesentat. Oritur quidem ab intellectu per suum actum; est vero similitudo rei intellectae." See also *De Ver*, q. 4, a. 2.

For the clarification of this matter, it should be noted that our intellectual word, which enables us to speak about the divine Word by a kind of resemblance, is that at which our intellectual operation terminates. This is the object of understanding, which is called the conception of the intellect – whether the conception can be signified by a 'simple expression,' as is true when the "intellect forms the quiddities of things," or whether it can be signified only by a 'complex expression,' as is true "when the intellect composes and divides." ... For example, "conceptions of" conclusions proceed 'from principles', conceptions of the quiddities of later things proceed from "quiddities of things prior", or at least an actual conception proceeds from habitual knowledge.[132]

From the foregoing, we can ascertain that Aquinas uses 'conception' (*conceptio*) indiscriminately on distinct levels to explicate the same act of the mind's comprehension. It is not to be restricted to a level. Whatever the intellect understands is known by way of concepts. Hence, both situations involve the intellectual act of conception. The first is properly an intellectual product referred to as concept (*conceptus*), and the second is the intellection better suited for the word, *judicium* (that we have accentuated), wherein the mind forms judgments about compounds and separate entities.

Hence, to judge realistically, as Gilson also affirms, implies to separate or compose constituents of reality understood through 'concepts' by intellectual act.[133] To show the complex nature of the human mind in its functionality, he supplements that the first conception of the intellect is 'what' through *simplex apprehensio essentiae et judicium* namely, 'that' something exists.[134]

132 *De Ver*, q. 4, a. 2: "Unde, ad huius notitiam, sciendum est, quod verbum intellectus nostri, secundum cuius similitudinem loqui possumus de verbo divino, est id ad quod operatio intellectus nostri terminatur, quod est ipsum intellectum, quod dicitur conceptio intellectus; sive sit conceptio significabilis per vocem incomplexam, ut accidit quando intellectus format quidditates rerum; sive per vocem complexam, quod accidit quando intellectus componit et dividit. Omne autem intellectum in nobis est aliquid realiter progrediens ab altero; vel sicut progrediuntur a principiis conceptiones conclusionum, vel sicut conceptiones quidditatum rerum posteriorum a quidditatibus priorum; vel saltem sicut conceptio actualis progreditur ab habituali cognitione." [Emphasis added].

133 See É. Gilson, *Being and Some Philosophers*, 190.

134 See É. Gilson, *Being and Some Philosophers*, esp. 203–204. Part of Gilson's submission is: "What comes is ... 'being' and this direct apprehension by a knowing subject immediately releases a twofold and complementary intellectual operation. First the knowing subject apprehends 'what' the given object is, next it judges 'that' the object is, and this instantaneous recomposition of the existence ... if the correct definition of being is "that which is," it necessarily includes an is, that is, existence. ... and such a general cognition still entails the most fundamental of all judgments, namely that being is." In this extract, Gilson aptly demonstrates the actual complexity of the human mind's activity. It is not merely a logical balancing but found in intuitive and complicated metaphysical analysis. We itemise a few: he acknowledges a 'first' and then 'adds' a second that he calls instantaneous recomposition. We see here his sharp ingenuity in interpreting Aquinas' proposal.



Additionally, in most of his discourses, Aquinas depicts the perfect moment of real knowledge as explicit judgment wherein the being of things is affirmed because it is contemplated. In so doing, Aquinas rightly distinguishes between the spiritual substances and rational beings in their mode of cognition.[135] As we saw previously, their mode of comprehension is only analogous to the human *simplex apprehensio*, which is limited by its matter-mixed nature. At this first instantaneous contact with reality, the human intellect (like the angelic intellect) simply (*statim*) grasps the quiddity of material content.[136] Nonetheless, the object of knowledge here is indistinct because it is not processed. As a result of this incompetence, the human mind moves immediately further into disentangling and compounding. There would have been no need for the human intellect's composition and division if it had a perfect knowledge in the first instance. Hence, the Angelic Doctor says, "now composition and division come after the consideration of what a thing is, for this consideration is their foundation. Therefore, composition and division are impossible in the divine intellect."[137] This is to say that, at the first mentioned instance, the human mind did not perfectly 'know' (get fully assimilated in) the object of knowledge, which means, that there is no specific 'word'.

We summarise our analysis and reflections on the interpretation of the Thomistic proposal on the mind's operations and the first intellectual concepts with the following illustration:

135 See *ST*, II–II, q. 49, a. 5, ad 2.

136 The principal facts about the intellect's operation at this level are that it is primordial, intuitive, incompetent, imperfect, and incapable to distinguish. It simply knows that everything 'is' because while it intuited *ens*, it also intuited the natural principles alongside to help it move to the next step where it can adequately assess "that which first falls to the mind."

137 *SCG*, I, Ch. 58, n. 4: "Compositio autem et divisio posterior est consideratione eius quod quid est, quae est eius principium. In operatione igitur divini intellectus compositio et divisio esse non potest."

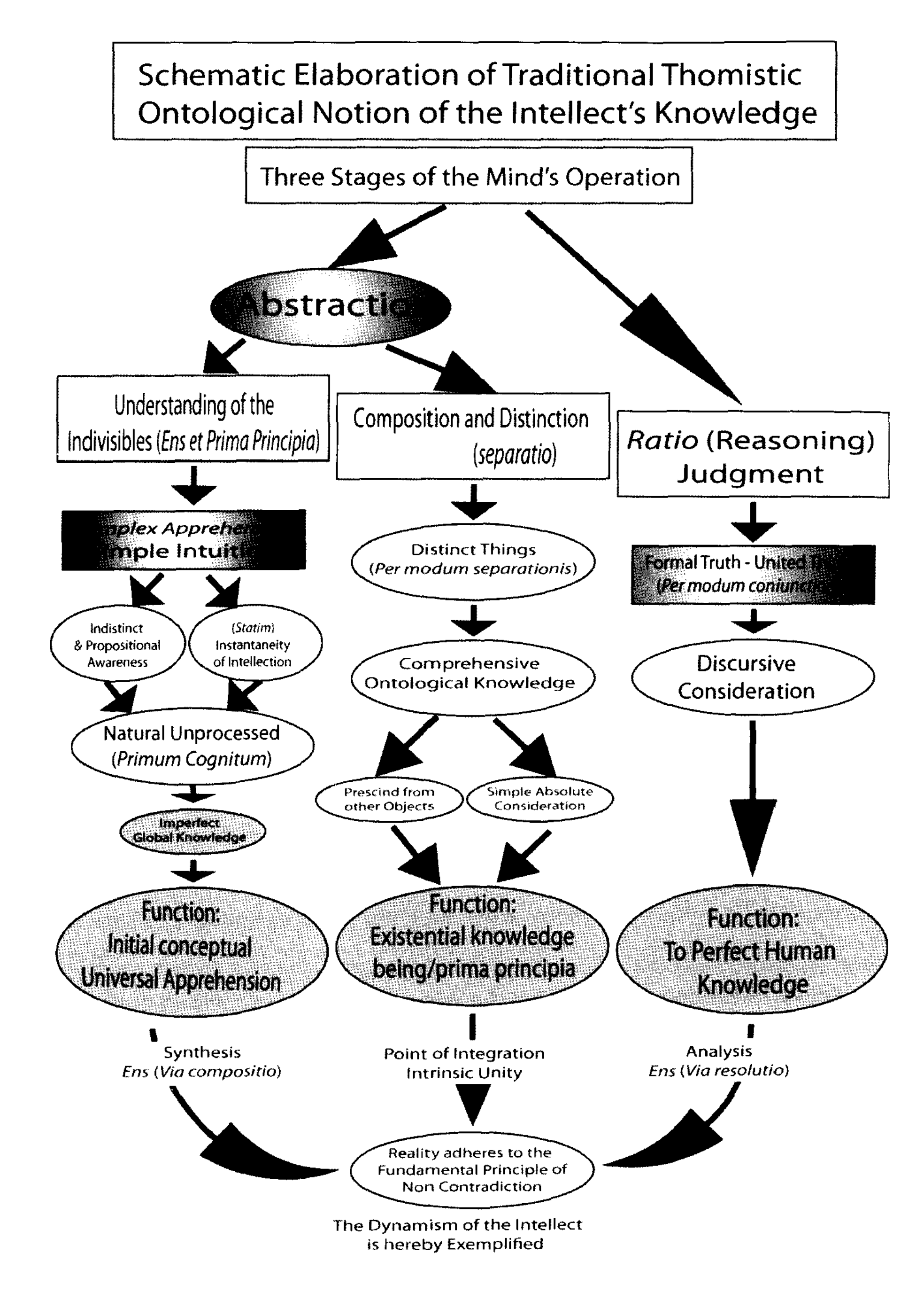



Figure 2.



### A.3.2 *A Concise Appraisal of the Problem of Abstractive Intuition of the First Intellectual Concepts*

This point of the *primum cognitum* is highly polemical among prominent Thomists. As Owens observes, this controversy, occasioned by the complexity in the understanding of the first conceptions of the intellect, has given rise to a great variety of interpretations.[138] We have already expressed some of our own views and have the conviction that if the real Thomistic perspective must be perused, there is need for complete objectivity in interpreting Aquinas' metaphysics. That is to say, Aquinas needs to be read in context. However, the instance of the initial concept of reality is very necessary in any ontological inquiry, because it concerns the "first conceptions of the mind." There are no two moments that are exactly identical on the ontological level of investigation. In as much as we have noted that there is no disintegration on the intellectual levels of operations for an intellectual act, nonetheless, there is an evident act of a 'flow-into' (progression), which remains a pointer to the distinguished stages.[139] It is also essential to know that without further examination into the sharp and subtle differences, the metaphysical study will be incomplete. An intellectual active moment is finer than a second in timing. It is very important to know that even in the physical level of human sciences, the moment of biological 'conception' is less than a second, and different from the moment of cell division. Analogically, this is the moment of imprecision and unity that leads immediately to the next stage of composition and division. Unless this nuance is understood, most Thomists will still fall into what we consider as similar incorrect interpretations of Aquinas and perpetuate the problem. Nevertheless, our aim herein is not to solve the existing problems. Our objective, rather, is to introduce the prominent role of the *nous*, which is subtly represented in Aquinas but almost neglected by most Thomists. We intend to make further suggestions regarding the possible resolution of the controversies.

We think that part of the problem of Thomists that we have investigated is the difficulty of making meaning out of the distinctions and the merge of intellectual operations for an integral hypothesis on the concepts (*ens et principia prima*). This forms part of our considerations in the investigation on "*Ratio*'s discursiveness and Intellect's instantaneity." Aquinas is unambiguous on this notion except that it needs much incisive examination to detect sharp distinctions that he emphasises on this all-important theme. Further, Aquinas never suggests an *a priori* knowledge of the first principles as some scholars may propose. Maréchal's ideas

138 See J. Owens, "Aquinas on Knowing Existence," in *The Review of Metaphysics* 29 (1975/6), 670–690.

139 See C. Fabro, *Percezione e pensiero*, 266. Fabro uses the word *continuazione* in the work just cited to convey the idea we classified here as a 'flow-into'. We hope to examine his variant nuance in the debate of the first conceptions of the human mind shortly. See C. Fabro, *Percezione e pensiero*, 266.

and interpretations of reconsideration of transcendental Thomistic metaphysics portray this trait. In this text, Maréchal regards the first intelligible as "the formal condition or *a priori* rule" of knowledge.[140]

On the other hand, we think Fabro makes a tangible contribution to this debate. In his work, *Percezione e pensiero*, among others, he justifiably suggests that "abstractive intuition" is very necessary for the realisation of integral knowledge.[141] Moreover, with his 'conjoint apprehension', in the article, "The Transcendentality of Ens-Esse and the Ground of Metaphysics," he blended this profound intuition.[142]

Fabro's reason in the mentioned article is that the notion of being includes two elements, 'essence' and the 'act of being'. And so, according to him, this notion cannot be a fruit of 'ordinary' abstraction that abstracts only essence. Therefore, he posits a composite that is born out of the conjoint apprehension, which envelops the reality of *ens*; thereby, he takes care of the understated in Aquinas' proposition.

With Fabro's assertion above, our musings on the integral formation of the first conceptions of the intellect are reflected. Consequently, abstractive intuition, which many Thomists, like Garrigou-Lagrange,[143] Buratti,[144] etc., underline and, that we already referred to, is a point of integration in human knowledge. To make this affirmation is to give the Thomistic intellectual levels of operation their proper place in Thomistic ontological cognitive theory.

Conclusively, we note that the notion of the first principles remains a very debatable notion among Thomists. We hope to examine this notion (especially through PNC) in a more detailed way in due course. However, considering most of Aquinas' submissions about their reality, we establish that, if the mind does not grasp the vague notion of *principia prima* immediately 'along with' the notion of *ens*, the mind cannot proceed with the next complex operations of composition and division, and so on. It is rather, through the most basic of these principles in form of identity or non-contradiction, that the mind judges (composes and divides) every other reality and justifies even *ens*. Our affirmation is that *ens et principia prima* are "co-conceptions of the human intellect" at the level of simple insight (not rational judgment) in order to assist in subsequent judgments. If the *principia prima*[145] are not conceived at the first instance of intuition, then having

140 See J. Maréchal, *Le point de départ de la métaphysique:* Vol. V: *Le thomisme devant la philosophie critique* (Bruxelles: Édition universelle, 1927), 325.
141 See C. Fabro, *Percezione e pensiero*, 266–267.
142 See C. Fabro, "The Transcendentality of Ens-Esse and the Ground of Metaphysics," in *International Philosophical Quarterly* 6 (1966), 389–427, esp. 423–427.
143 See Garrigou-Lagrange, *Dieu: son existence et sa nature: solution thomiste des antinomies agnostiques* (Paris: G. Beauchesne, 1933), 110.
144 See M. L. Buratti, "I principi primi secondo San Tommaso," 221–223, esp. 223.
145 *Principia prima* used in the passage is a group identity for all the first principles exemplified in the most fundamental of them all (the PNC).



been judged, they cannot be objective judges or first principles. We may then risk the danger of falling back to infinite regress that Aristotle forewarned. As we noted in our previous chapter, they are likened to an arbiter, an ever-present underlier *per se*, and the human intellect cannot function without it. Their nature at the ontological level is primary, so to say, co-existential with *ens*. This could explain the reason Aquinas, for deficiency of words, in some cases, presents them as innate,[146] almost in an unnatural way of knowing, to the human intellect.

Subsequently, the necessity of the consciousness of the complexity of the intellect's operations cannot be overemphasised. The unity of the intellect does not admit of clear-cut separations. Both the first apprehension and the second are the human intellect's acts of comprehension, and are correlates. We do not just need logical but insightful (metaphysical) interpretation in order to apprehend the procedure involved. The metaphysical problem of Thomistic intellectual intuition amongst scholars in apportioning strict roles to intellectual operations is hatched and mostly felt herein. Aquinas himself does not attempt such, because it would simply be incoherent about his proposals.

### *A.3.3 A Brief Look at the Thomistic Notion of* Separatio

The Thomistic notion of *separatio* is linked to the notion of being. For this reason, many Thomists have merged its discourse on the concept of being; others still have not given it adequate attention; others, like Wippel,[147] found it a crucial element in the Thomistic metaphysical enterprise. Authors, like Owens, designate it mainly as a specific aspect of judgment in the inquiry into the existential being.[148] We deem it necessary here to accentuate it for its major role in *primum cognitum*. In the commentary on *De Trinitate* of Boethius, Aquinas asserts:

> Consequently, the consideration of substance without quantity belongs to the order of separation rather than to that of abstraction. We conclude that there are three kinds of distinction in the operation of the intellect. There is one through the operation of the intellect joining and dividing which is properly called separation; and this belongs to divine science or metaphysics.[149]

146 See *De Ver*, q. 16, a. 1, ad 14.
147 See J. F. Wippel, "Metaphysics and *Separatio* According to Thomas Aquinas," in *The Review of Metaphysics*, 3 (1978), 431–470.
148 See J. Owens, "A Note on the Approach to Thomistic Metaphysics," in *The New Scholasticism* 28 (1954), 454–476, esp. 474–476.
149 *In De Trin*, q. 5, a. 3: "Substantia autem, quae est materia intelligibilis quantitatis, potest esse sine quantitate; unde considerare substantiam sine quantitate magis pertinet ad genus separationis quam abstractionis. Sic ergo in operatione intellectus triplex distinctio invenitur. Una secundum operationem intellectus componentis et dividentis, quae separatio dicitur proprie; et haec competit scientiae divinae sive metaphysicae."

The foregoing excerpt is a lead to the principal view of Aquinas on *separatio*, the second intellectual function that we wish to examine here. According to some Thomists such as, Gilson,[150] Maritain,[151] Elders,[152] Schmidt,[153] Mondin,[154] Wippel,[155] Owens,[156] Sanguineti,[157] McInerny,[158] and others within a Thomistic metaphysical understanding, judgment is being contended as a requisite in the notion of 'being'. If the proposal for the necessity of 'judgment' in 'being' is true, accordingly, the 'what' of the thing's nature is inevitably known through conceptualisation while existence is known as something accidental to nature. However, that is not all about the hypotheses that there are. As Wippel points out, in order to have a non-restrictive notion of 'being' or, rather for a balanced view on 'being', a negative judgment (*separatio*) is required. Hence, this expresses Aquinas' opinion that *separatio* is characteristic of metaphysics because the latter is the science of 'being as being.'[159] Initially, *separatio* is conceived as negative judgment in the sense of being separated from matter. Nonetheless, *separatio* can be extended either to a union (*compositio*) or an existential separation (*secundum esse*). This is a particular interpretation of Aquinas. Consequently, the holistic 'being' in metaphysics is determined by this notion, and that is the crux of the various opinions and expositions about the distinctive category of judgment; namely, *separatio*. Thus, only 'judgment' can assure an individual that his/her notion of being embraces being as existing, an *est* together with an *id quod*, which implies an 'is' in conjunction with a 'that which'.[160] For this reason, special attention is solicited in regard to this particular sort of judgment in Aquinas, the second operation of

150 See É. Gilson, *Being and Some Philosophers*, 190–215. See also É. Gilson, *The Christian Philosophy of St. Thomas Aquinas* (Notre Dame (IN): University of Notre Dame Press, 1994), 40–45.

151 See J. Maritain, *Existence and the Existent: An Essay on Christian Existentialism*, 22–35.

152 See L. Elders, *The Metaphysics of Being of St. Thomas Aquinas in a Historical Perspective* (Leiden; New York; Köln: E. J. Brill, 1993), esp. 16–24 and 152.

153 See R. W. Schmidt, "L'emploi de la séparation en métaphysique," in *Revue Philosophique de Louvain* 58 (1960), 373–393.

154 See B. Mondin, "Il momento ascendente della metafisica di S. Tommaso d'Aquino," in *Rivista di filosofia neo-scolastica* 55 (1963), 287–316, esp. 294.

155 See J. F. Wippel, "Metaphysics and *Separatio* According to Thomas Aquinas," in *The Review of Metaphysics* 31 (1978), 431–470.

156 See J. Owens, *An Elementary Christian Metaphysics*, 45–56; 370. See also J. Owens, *An Interpretation of Existence* (Houston (TX): Center for Thomistic Studies, 1985), 50.

157 See J. J. Sanguineti, *La filosofía de la ciencia según Santo Tomás* (Pamplona: EUNSA, 1977), 134–140 and 146–149.

158 See R. McInerny, *St. Thomas Aquinas*, (Notre Dame (IN); London: University of Notre Dame Press, 1977), 91–93.

159 See *In De Trin*, q. 5, a. 3; See also J. F. Wippel, "Metaphysics and *Separatio* According to Thomas Aquinas," 431–470, 441.

160 See J. F. Wippel, "Metaphysics and *Separatio* According to Thomas Aquinas," 431–470, 431.



intellect, which Aquinas sometimes refers to as *separatio*.[161] Essentially, in recent years, considerable interest has been shown in the inquiry about this form of 'judgment' as crucial to the act-of-being in general, and, specifically, at the core of metaphysics.

Drawing from the above, some Thomistic scholars refer to Aquinas' proposal on *separatio* as one that gives access to metaphysics. As such, this judgment (*separatio*) refers to being (*esse*). Hence, metaphysics should be directed to the knowledge of the act-of-being.[162] Can, one, then, say that metaphysics, as a result of *separatio*, refers exclusively to the act-of-being of things? It is apparently so, since Aquinas explicitly asserts that this *separatio* pertains to the second operation (or judgment) of the mind, which concerns the act-of-being.[163] In view of the foregoing, De Raeymaeker suggests that Aquinas ascribes to metaphysics a higher status than the quidditative ambit so as to concentrate on *esse*.[164] Owens expresses a similar notion, because this act-of-being must be the proper subject of metaphysics.[165] Phelan has the same view.[166] These views are confronted with an older essentialist notion of scholars, like Descoqs, who maintain that the act-of-being is not correspondent to this subject matter, because the 'being' in 'thing' is always contingent and is always an individualised act of existence while a scientific act examines the necessary and the universal.[167] Yet still other Thomists hold that inasmuch as metaphysics appertains to essence, it is also, effectively, being.[168] Nonetheless, others, like Wilhelmsen, think that Aquinas' notion is that metaphysics depends on the perception that the act-of-being is not a subject, or on the non-existence of being itself.[169] In effect, the arrangement (of the subject

161 *In De Trin*, q. 5, a. 3.

162 See L. Elders, *The Metaphysics of Being of St. Thomas Aquinas*, 21.

163 See *In De Trin*, q. 5, a. 3: "Secunda vero operatio respicit ipsum esse rei."

164 See L. De Raeymaeker, "La profonde originalité de la métaphysique de saint Thomas d'Aquin," in *Die Metaphysik im Mittelalter: ihr Ursprung und ihre Bedeutung: Miscellanea Mediaevalia*, II (1963), 14–29, 28.

165 See J. Owens, "A Note on the Approach to Thomistic Metaphysics," 454–476.

166 See G. B. Phelan, "A Note on the Formal Object of Metaphysics" in A.C. Pegis, ed. *Essays in Modern Scholasticism* (Westminster MD: 1944), 47–51. "When therefore, the question is asked, 'what is the formal object of metaphysics?' there can be but one answer, namely, that which formally constitutes its object, being (*id quod est*) as being (*id quod est*), and this is the act of being." 50. "Metaphysics is definitely existential." (*Ibid*.). We add but definitely not directed towards existentialism.

167 See P. Descoqs, *Institutiones metaphysicae generalis: éléments d'ontologie* (Paris: G. Beauchesne, 1925), 100 ; See also J. Gredt, *Elementa philosophiae aristotelico-thomisticae*.

168 See J. Maritain, *Sept leçons sur l'être et les premiers principes de la raison speculative* (Paris: P. Téqui, 1936); See also V. E. Smith, "On the Being of Metaphysics," in *The New Scholasticism* 20 (1946), 72–81.

169 See F. D. Wilhelmsen, "The Concept of Existence and the Structure of the Judgement: a Thomistic Paradox," in *The Thomist* 41 (1977), 317–349, 339. "... the insight that the *esse* is not-being-a-subject."

and predicate) of the usual expression in every statement would be denied in all affirmations of metaphysics. The problem in this proposal could be the lack of distinction between our propositional statements about the optimal, immaterial being and those of created things. We may not delve into more details in this discourse, as it is not directly our main focus. A full discourse on it may constitute a major digression to our central investigation. Our concern is to discover how *separatio* is a major attribute in the designation of being in reality. Nonetheless, a reference to it (as we have done) is necessary since, in our perspective, the *esse* of metaphysics (an indirect object here) is a real *esse*. It is the point of judgment in Aquinas, which makes 'being' real.[170]

Additionally, in Owens, we read that the notion of 'being' as sensible and supersensible is understood only through the activity of the judgment of separation. He portrays 'being' as beyond-sensible, non-quantitative, non-mobile, non-temporal, except for its observable instances. Following the preceding, 'being' is, so to say, a supersensible 'being'. Only through this act of judgment may 'being' be experienced in sensible things as separated from the sensible commitments.[171] This implies that separation is the function that adds the existing factor to the abstract concept. Hence, existence is known not by conceptualisation but by the notion of judgment, which, for Owens, is separation. According to him, the characteristics of categories and conceptualisation are 'separated' from existence through this 'act', in order to be real. This separation, as we mentioned, is in contradistinction with abstraction.[172] Owens considers *separatio* as a judgment different from abstraction through which we know the dissimilarity between the manner of the knowledge of natures in the human mind and the modality of the knowledge of 'being'.[173]

Schmidt emphasises that the notion of *separatio*, as a method proper to metaphysics, has continued to receive growing attention in the recent years as a result of its vitality in the sphere. Considering the commentary on *De Trinitate*, Schmidt thinks that, for Aquinas, metaphysics, in the strict sense, proceeds through *separatio* rather than by abstraction.[174] Wippel's notion, reflected above, shares a common ground with Schmidt.[175] Accordingly, this *separatio* belongs

170 See L. Elders, *The Metaphysics of Being of St. Thomas Aquinas*, 13–24. Since the act-of-being is the most profound reality and highest excellence in reality, metaphysics refers even more to it than to essence, i.e. the perception to be gained into the (created) act of being is the most valuable attainment in the investigation about 'common being.' And so, metaphysical speculation can be said to necessarily realise its completion and perfection in the knowledge of God as Self-Subsistent Being Itself.

171 See J. Owens, *An Elementary Christian Metaphysics*, 96–97.

172 See J. Owens, *An Interpretation of Existence*, 50.

173 See J. Owens, *An Elementary Christian Metaphysics*, 370.

174 See R. W. Schmidt, "L'emploi de la séparation en métaphysique," 373–393, esp. 392–393.

175 See J. F. Wippel, "Metaphysics and *Separatio* According to Thomas Aquinas," 431–470, 431.



to judgment instead of simple apprehension, and consists in negative judgment. The place of separation is found not in the first conception of being, exemplified in the sensible quiddity, but in the passage from the first concept to that of 'being'. For Schmidt, this *separatio* is a process to transcend all the limitations or particular modes, and it is applicable to every condition of 'being'. For this reason, there is an ascendant and descendant notion of *separatio*. *Separatio* embraces both the transcendental notion of being and the existential aspect, so that we can conceive of 'being', as it is, transcendental in rapport with existence. Subsequently, this notion of *separatio* simultaneously includes the potential, the possible, the accidental, and the incomplete in the identical concept. Separation, therefore, serves the knowledge of the intrinsic and extrinsic 'principles' and the properties of 'being'.[176] It does not restrict being, but is a distinctive method through which being opens up and arrives at the entire subject of metaphysics. We consider this interpretation a more comprehensive one in regard to this study.

Sanguineti, in line with Schmidt, affirms that only metaphysics can effect a real separation, since it looks at the entire being (*esse*) of *ens* and not just an abstract aspect of its totality. He supposes that Aquinas designates *separatio* in the commentary of Boethius *De Trinitate* as applied to metaphysics (that is, its method).[177] Sanguineti asserts further that *separatio* is the natural method of spontaneous knowledge because, through it, we know things as they are. This is in accordance with an actual union or division of concrete components, according to reality, with the furtherance of intelligence in the sensitivity or *conversio ad phantasmata* and in the formation of judgment. Thus, metaphysics takes the *suppositum*[178] as its object, which is really 'separated' in its entirety, and not according to 'this' or 'that' other abstract aspect.[179] Additionally, Sanguineti translates the Thomistic proposal that metaphysics embraces the subsistent whole. Metaphysics deals with *separabilia*, and articulates the separable and the separated in being (*esse*). Hence, based on this fact, Sanguineti confirms its methodology as *separatio*.[180] This indicates a real separation in propositions and not the mental separation or the inverse, which is abstraction.[181] Accordingly, Sanguineti establishes

176 See R. W. Schmidt, "L'emploi de la séparation en métaphysique," 373–393, esp. 393. [Emphasis added].

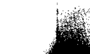
177 See J. J. Sanguineti, *La filosofía de la ciencia según Santo Tomás*, 134; See also *In De Trin*, q. 5, a. 3.

178 *Suppositum* is very significant in Thomistic thought; we deem it necessary, here, to highlight the meaning that the Angelic Doctor attaches to it. According to him, "... suppositum significatur ut totum, habens naturam sicut partem formalem et perfectivam sui." (*ST*, III, q. 2, a. 2).

179 See J. J. Sanguineti, *La filosofía de la ciencia según Santo Tomás*, 136–137.

180 See also *In De Trin*, q. 5, a. 4.

181 See J. J. Sanguineti, *La filosofía de la ciencia según Santo Tomás*, 147.



that when *esse* is abandoned, then *separatio* applies only to some aspects; that is to say, abstraction converts to *separatio*, which is the error that the Angelic Doctor cautions against Platonic formalism. For this reason, he insists that to posit abstraction as the metaphysical method corresponds to losing the *suppositum* and *ens*. The reason is that *suppositum* possesses the act-of-being (*esse*) and is the totality (by participation) in which all accidents converge.[182]

McInerny succinctly expresses a similar view with Sanguineti on the notion of *separatio*, demonstrated in reality through metaphysics. For him, *separatio* is not just a notional separation of *esse* or existence. Rather, metaphysics is separated in reality and rests on the fact of the judgment that, in actual existence, there are things independent of and separate from matter and motion. Hence, he designates *separatio* as properly about reality.[183]

On the other hand, Mondin thinks that Aquinas has a special place for *separatio* by using it as one of his inductive-phenomenological terminologies that designates "that which belongs to 'being' as such" or rather, that which belongs to the formality of being, from that which belongs to 'being' inasmuch as it assumes a particular determination, that is, of 'this' or 'that' 'being'.[184]

Furthermore, inasmuch as Wippel expresses the major ideas reflected above with the main concern about establishing the relationship between *separatio* and metaphysics, he categorically states that consideration of being, as non-material, belongs to *separatio*. He succinctly asserts that *separatio* is a negative-judging operation through which one is able to distinguish one thing from another with the awareness that the particular one is excluded from that other. Wippel further asserts that through *separatio*, Aquinas shows that substance, which is the intelligible material of quantity, can exist exclusive of quantity. Separation, therefore, is a process by which the intellect clearly acknowledges and affirms that the 'being' and the 'reality' of something are not established on its materiality or changing nature or quantity. Through separation, one can avow to negative immateriality that is the neutral nature of being.[185] Thus, *separatio* offers a general notion of the core subject of metaphysics underlined in different aspects and levels, in other words, 'being'. Wippel explicates that for Aquinas, in addition to the immaterial, *secundum esse et rationem*, e.g. God and intellectual substances, those are also said to be separate from matter, exclusive of matter, like, *ens commune*. For this reason, Wippel establishes that this sort

182 See J. J. Sanguineti, *La filosofía de la ciencia según Santo Tomás*, 140. See also *ST*, III, q. 2, a. 2.
183 See R. McInerny, *St. Thomas Aquinas*, 92.
184 See B. Mondin, "Il momento ascendente della metafisica di S. Tommaso d'Aquino," in *Rivista di filosofia neo-scolastica* 55 (1963), 287–316, 294.
185 See J. F. Wippel, "Metaphysics and *Separatio* According to Thomas Aquinas," 431–470, 441–442.



of immateriality, articulated in *ens commune*, is the subject of metaphysics.[186] Hence, Aquinas affirms:

> ... something can exist separate from matter and motion in two distinct ways: first, because by its nature the thing that is called separate in no way can exist in matter and motion, as God and the angels are said to be separate from matter and motion. Second, because by its nature it does not exist in matter and motion; but it can exist without them, though we sometimes find it with them.[187]

Albeit contextually diverse from our immediate analysis, in line with Wippel, Elders gives *separatio* a wider interpretation worth examining. According to him, *separatio* related to the constitution of metaphysics is an insight, which expresses that not every 'being' is composed of matter. From this hypothesis, he launches an idea of a new concept of 'being'. And so, the role of separation, concerning metaphysics is mutually distinguished from abstraction. Abstraction is intrinsically oriented and goes together with scientific statements in philosophy of nature as well as metaphysics, while separation is an external element.[188] If we count on Elders' analysis, the import of separation in the knowledge of being becomes evident. *Separatio* will, then, mean an external condition for the cognition of being, but is that just the sole implication? If we give it away as an external condition, in that case, it does not belong to the intrinsic elements in the cognition of a reality, such as, 'being'. We think *separatio* has much more import than that, considering the very analysis of Elders. We withhold our opinion, since an exact and proper interpretation to this, is largely dependent on one's approach to the argument and the scope of inquiry.

Furthermore, according to Elders, it is very significant that the first judgment expresses both difference and separation. The reason is that, when it does so, it opens the way for further intellectual considerations. Thus, the intellect has more capability to think further into implications of that which it conceives as general knowledge. To give an accent to metaphysics, Elders suggests that this process (*separatio*) is repeated when one arrives at the rudiments of metaphysics: the intellect gets to a conviction that it is not necessary for 'being' to 'be' of matter. The intellect, therefore, reaches a fine insight that it cannot part with the immaterial,

186 See J. F. Wippel, "Metaphysics and *Separatio* According to Thomas Aquinas," 431–470, 457.
187 *In De Trin*, q. 5, a. 4: "... secundum quod dupliciter potest esse aliquid a materia et motu separatum secundum esse. Uno modo sic, quod de ratione ipsius rei, quae separata dicitur, sit quod nullo modo in materia et motu esse possit, sicut deus et Angeli dicuntur a materia et motu separati. Alio modo sic, quod non sit de ratione eius quod sit in materia et motu, sed possit esse sine materia et motu, quamvis quandoque inveniatur in materia et motu."
188 See L. Elders, *The Metaphysics of Being of St. Thomas Aquinas*, 23. See *ST*, I, q. 85, a. 1, ad 2.

the human person's spiritual aspiration.[189] Thus, Elders reiterates that, when one enters into metaphysics this insight becomes more incisive for the novel and global rumination on being. Subsequently, he concludes that, through this negative observation (*separatio*), the intellect becomes free to penetrate beyond matter to grasp 'being' holistically (*ens commune*). By so doing, it could rise to the wholly Different, the First of all principles.[190] We sum up Elders' view with the Thomistic notion on the kind of 'immateriality', applicable to *ens commune*, which is accomplished by *separatio* as depicted in Aquinas' excerpt below:

> We say that being and substance are separate from matter and motion not because it is of their nature to be without them, ... but because it is not of their nature to be in matter and motion, although sometimes they are in matter and motion.[191]

Although they seem to underline different views of *separatio* in Aquinas' notion from the texts of *De Trinitate*, most Thomists, who ruminated on this discourse, tried to underscore the importance of *separatio* to being in the Thomistic metaphysics, and we cannot undermine its essential nature. Balmaseda Cinquina, who discusses *separatio* as one of the habits, demonstrates its fundamental attribute in saying that through *separatio* we have the maximum actual universality that takes account of the intimacy and commonness of all being and its act-of-being, without resorting to any. Moreover, according to Balmaseda Cinquina, if the first science is wisdom, if it exercises a function of *sapientia* as habit, it is precisely because of *separatio*.[192] To this notion we append, whatever the argument may be, that despite the fact that Aquinas did not employ *separatio* in many of his works, he still gave it precedence in the determination of the act-of-being. It is the 'judgment' that gives metaphysics its true nature. In our mind, the Thomistic *separatio* is a vital ingredient for metaphysics to thrive in the knowledge of 'being' and the fundamental metaphysical principles. Metaphysics 'is' the science of 'being' (material/immaterial) because of the 'negative judgment' of the mind (separation); the 'basic principles' are nominated as such, as a result of the indispensable character of this intellectual function.

189 See L. Elders, "Le premier principe de la vie intellective," in *Revue Thomiste* 62 (1962), 571–586, 582.

190 See L. Elders, *The Metaphysics of Being of St. Thomas Aquinas*, 152.

191 *In De Trin*, q. 5, a. 4 ad 5: "Ad quintum dicendum quod ens et substantia dicuntur separata a materia et motu non per hoc quod de ratione ipsorum sit esse sine materia et motu, ... sed per hoc quod de ratione eorum non est esse in materia et motu, quamvis quandoque sint in materia et motu."

192 See M. F. Balmaseda Cinquina, "*Separatio* y otros hábitos intelectuales," in *Studium* 9 (2006), 311–320, 319.



### *A.4 Précis on a few Thomists' Views on the Grasp of Being in Act*

So far, our analysis on *ens* necessitated our choice of a few Thomists to ascertain their proposals on the first conceptions of the intellect from the standpoint of Thomistic legacy. Usually, most great philosophies present a specific turn and focus on a crucial point in accordance with the particular problems and needs of the epoch. Likewise, Aquinas' perspective presents us with a concrete inquiry, the act-of-being. Hence, it is hardly startling that, when his philosophical outlook is confronted with the reinstatement of philosophy and concrete reality, which aberrations of some schools of thought, like idealism, facilitated, many Thomists engage themselves in the notion and rediscovery of *ens*. Since 'being' is a dynamic notion, each scholar's interpretation articulates its characteristic conception by the human intellect and demonstrates the exquisiteness of its nature. The independent arrival of diverse Thomists at analogous conclusions is of great significance for their convergence. Their assorted views and interpretations are enriching to the foundational Thomistic notion. Limiting our study herein to the nominated few below will help our determination and study of the variant perspectives about the Thomistic notion of the *primum cognitum*, and this will, hopefully, support our principal investigation.

#### *A.4.1 Maritain on the Intuition of Being*

The principal belief of Maritain is that Aquinas reaches existence through the intellect's operation. This is because he considers 'being' as the proper object of the intelligence, not just with its essential or quidditative propensity but also existentially. The entire framework of Thomistic thought hinges on existence itself, not necessarily as seen in the practical philosophy in order to produce it, but for the sake of its knowledge.[193] Accordingly, Maritain asserts that, *veritas sequitur esse rerum* (truth follows upon the 'being' (*esse*) of things); which means, upon subjects that are 'trans-objective' with which thought is confronted. He interprets this truth as the adequation of the inherent act of our thought to the existent thing outside the thought. For this fact, knowledge as such, is immersed in existence. This explains why the pattern of any true knowledge, according to him, is the intuition of the 'thing' which is seen, and that casts its light on the seer (the person who sees it). In addition, he suggests that sense arrives at actual existence without knowing that it is existence. Thereon, sense conveys existence to the intellect as an intelligible, unaware of its value as an intelligible; then, the intellect in its turn, treasures, recognises, and names the intelligible matter as 'being.'[194]

193 See J. Maritain, *A Preface to Metaphysics: Seven Lectures on Being* (New York: Sheed and Ward, 1948), 21–24.

194 See J. Maritain, *Existence and the Existent: An Essay on Christian Existentialism* (Garden City (NY): Doubleday and Co., 1957), 20–21.

This explains Maritain's belief that only the metaphysician, as such, is a philosopher properly acknowledged as one, since he intuits 'being' even when that intuition is misrepresented in some schools (as in Platonism and others). The said intuition of being is *ens secundum quod est ens* (being insofar as it is a being). For him (Maritain), this is the point of departure for metaphysics, without which there is no metaphysician at all.[195] This intuition of *ens* entails a rise to the apprehension of being *secundum quod est ens*. According to Maritain, 'being' viewed from this lens surpasses the 'vague' 'being' of common sense and the 'particularised' 'being' of the sciences or philosophy of nature; likewise, it is neither the logical 'de-realised' 'being' nor the dialectical 'pseudo-being'.[196] It is simply 'being' that is attained by the intellect at the peak of an abstractive intellection (natural knowledge).[197]

The sort of being intuited this way is through the mind's intensive visualisation by the in-depth stirring and trans-illumination of the intellect through the act of existence, which is apprehended in things. Being, at this point, is seen with its distinctive qualities, as trans-objectively subsistent, essentially diversified, and totally independent. Maritain further believes that this intuition of being is also the intuition of its analogical significance and transcendental nature.

Moreover, Maritain maintains that the metaphysical *habitus* is a requisite for the intellect's capacity for the intuition of being, *ens in quantum ens*. Conversely, this intuition of being causes and effects the metaphysical *habitus*. This contemporaneity and reciprocity in causation basically implies that the intellectual virtue of the metaphysician (metaphysical *habitus*) is simultaneously generated with the disclosure of its proper object. This same object is prior, nonetheless, not in time but in ontological status. For Maritain, according to the order of nature, the intuition of being precedes the inner *habitus* of the metaphysician. Hence, this first perception establishes the initial moment of the inception of the *habitus*. On the other hand, it is through the progressive operation of this metaphysician's *habitus* that the being (*ens*), the object of the metaphysician's inquiry, is further perceived.[198]

Thus mapped out, Maritain's proposal for the intuition of being is that it is a very simple insight whose substance and significance defies human speech because of the inadequacy of the human language and the lofty character of this intuition. It is a decisive moment of intellectual illumination and penetration, in contact with reality, through which the soul grasps being. There is no question of rational analysis involved in this intellectual exercise, either in form of induction or of deduction or of syllogism, but just the 'intuition' that is the inventive reality. The senses or the Thomistic 'sensitive judgment' have an indispensable and

195 See J. Maritain, *Existence and the Existent: An Essay on Christian Existentialism*, 29.
196 See J. Maritain, *A Preface to Metaphysics: Seven Lectures on Being*, 33–42.
197 See J. Maritain, *Existence and the Existent: An Essay on Christian Existentialism*, 29.
198 See J. Maritain, *A Preface to Metaphysics: Seven Lectures on Being*, 44–45.





primordial part in these dynamics.[199] For Maritain, nothing else but being itself produces this sort of intuition. This intuition, according to Maritain, differs from Bergson's because of the latter's denial of the intellectual aspect.[200]

Maritain justifiably regards the essences as the objects of the first operation of the mind or simple apprehension. However, he places the confrontation of the act of existence within judgment. The intellect, he suggests, encases itself and is self-contained in each of the instances of the intellectual operation. Thus, in the first intellectual comprehensive activity (out of the sensitive reality, in its initial act of self-affirmation through the expression to itself), the intellect simultaneously apprehends and judges instantaneously. This is the intellectual formation of idea (being) and utterance of the initial judgment (in existence) as it forms the idea. This implies that the intellect grasps the treasure in judgment as it envelops it in the simple apprehension. In effect, the mind pictures the treasure in the first and completely primary idea, which does not only result from simple apprehension but also from its capacity to judge, namely, the act of existence. Maritain, therefore, confirms his previous premise that judgment is an existential function.[201]

Hence, the act-of-being in Maritain's conception is existential. However, we first disentangle the essences from concrete reality and go back from the essences into the reality of existence by a sort of unifying blend of the essences with existence. This could explain Maritain's insistence on the fact that we apprehend reality through sensible knowledge, which later translates to the intensive intellectual intuition, and our judgments attain their object when they are resolved into it directly or indirectly. This is to say that the visible object of sense (*res sensibilis visibilis*) is the yardstick for every judgment, from which we must judge every other thing (*ex qua debemus de aliis judicare*) because it is the measure of existence.[202] In this way, Maritain places the Thomistic proposal about the first conceptions of the mind in the judgment of experience expressed as the original idea in *simplex apprehensio*, the intuition of being.

### *A.4.2 A Quick Glance at the Existential Judgment of Gilson*

Gilson is another prominent Thomist whose hypothesis on the act-of-being attracts our interest for the sake of this paper. Gilson is essentially an existential Thomist, who believes that Aquinas' doctrine, especially on the *primum cognitum*, is pre-eminently the doctrine of existence. Gilson's main philosophical aim was the recovery of authentic Thomism, which according to him, is existentialism. For

199 See J. Maritain, *Existence and the Existent: An Essay on Christian Existentialism*, 30.
200 See J. Maritain, *A Preface to Metaphysics: Seven Lectures on Being*, 46.
201 See J. Maritain, *Existence and the Existent: An Essay on Christian Existentialism*, 22.
202 See J. Maritain, *Existence and the Existent: An Essay on Christian Existentialism*, 32–33.

him, the authentic Thomistic doctrine focuses on the primacy of existence in the account of 'being'. Gilson believes that being is the first of all principles, since it is the first object accessible to our understanding.[203] Anything that the human mind can conceive of or apprehend is 'that which is' or 'can be'.[204] Gilson thinks, therefore, that the notion of being (*ens*) accompanies all our representations, because it is absolutely first with an exigency of the safeguard of the rights of *esse*. This is obtainable because being which is *ens habens esse* is the ultimate as it refers to the act-of-being. According to Gilson, the notion of *ens* is the fruit of a combined act of the mind, the Aristotelian intellection of simple objects (*intelligentia indivisibilium*) and the Thomistic *compositio* (judgment). The two, he says, concern something real but do not have equal penetration into 'it'. Thus, reflecting on Aquinas, he suggests that intellection arrives at the essence that is the definition of the formulation, while judgment gets to the real act-of-being.[205] In terms of existence, judgment adds all the relations, since its proper activity is the signification of the act of existing.[206]

Furthermore, he explicates that there is no actual existence without being enveloped in an abstract concept. Additionally, whatever the act-of-being that is experienced, the concept remains identical. Every *esse* (to be) implies the act of an *ens* (being). One cannot, therefore, think of *ens* without *esse* and vice versa. The act-of-being is always of something that exists.[207]

Gilson also suggests that the two prerequisites for the likelihood of existential judgments are the inclusion of an existential act above its essence in reality and the natural capacity of the human mind to grasp it. He explicates further that judgment is beyond essence and existence beyond abstract representation; nevertheless, it is not beyond intellectual knowledge's compass because judgment is the most ideal form of the mind's understanding.[208] Just as Maritain lays emphasis on the intuition of being, which brings about its intellectual knowledge, Gilson posits that the primacy of *esse* guarantees the ontological stability of any being

203 See É. Gilson, *The Christian Philosophy of St. Thomas Aquinas* (Notre Dame (IN): University of Notre Dame Press, 1994), 40. Gilson makes a very interesting note here about one of Aquinas' delightful habits of referring to Avicenna whenever he proposes the thesis of the *primum cognitum*. For instance, Aquinas says: "Primo in intellectu cadit ens, ut Avicenna dicit."–*In I Metaph*, lect. 2; he again submits in *In X Metaph*, lect. 4: "Primo in intellectu nostro cadit ens." (*In X Metaph*, lect. 4). Hence, it is apparent that Aquinas uses Avicenna's favorite ontology for a sort of support. See É. Gilson, *The Christian Philosophy of St. Thomas Aquinas*, 40 n.

204 See É. Gilson, *The Christian Philosophy of St. Thomas Aquinas*, 40.

205 See *In I Sent*, d. 19, q. 5, a. 1 ad 7: "Prima operatio respicit quidditatem rei; secunda respicit esse ipsius."

206 See É. Gilson, *The Christian Philosophy of St. Thomas Aquinas*, 44–45.

207 See É. Gilson, *The Christian Philosophy of St. Thomas Aquinas*, 44.

208 See É. Gilson, *Being and Some Philosophers* (Toronto: Pontifical Institute of Mediaeval Studies, 1949), 202.



even in the case of a contingent being. He also believes that essence is agreeably related to *esse*, that being is dynamic and always tends by its operations to completion.

Therefore, the central hub of Gilson's metaphysical Thomism is evident in the existential approach to the first intellectual conceptions. Based on this, he further proposes that the most critical mistake of the essentialists' metaphysics is the non-realisation of the true nature of essence, which is that 'essence' of some 'being'. This is because any concept that expresses the essence of a thing is an incomplete expression, since there is something that transcends the essence of an object in any concept. This is due to the fact that the actual object of any reality has more in content than the abstract description. The said content is the act of existence that transcends the formal representation and essence, and is accessible to judgment. Hence, it is the proper role of judgment to determine (utter the word) 'existence'. The primary error of the metaphysics of essence is the misplacement of the 'part' for the 'whole'. This, he maintains, is evident in some speculations about the essences as if they were an integral reality while neglecting the entire intelligible reality.[209] As a matter of fact, essences are not to be considered as final objects of intellectual knowledge since their nature forms part of the concrete 'being'. And so, judgment, as such, is a cognitive capacity distinguished from and higher than simple abstract conceptualisation. According to Gilson, this is largely misconstrued among essentialist Thomists.

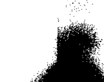
In view of the above, Gilson attempts to resolve the problem of what it means 'to exist' and how man knows *esse*. According to him, *esse* for Aquinas is the ultimate act in relation to any other act with the form of any thing included. This is to say that the essence or substance of a reality is potential in relation to its *esse*. Hence, as essence is merely a possibility until actualised by *esse*, the latter is *actus omnium actuum et perfectio omnium perfectionum*. Hence, Gilson demonstrates that existence is the heart of reality.[210]

On the problem of how *esse* is known, Gilson, using Thomistic texts, develops a noetic whereby the human person knows immediately and instantly by his intellect the existence of things he perceives through the senses. Both operations are required for knowledge. Although the distinction between abstract knowledge and judgment are fundamental, it does not also suggest a separation. This implies that abstraction and judgment are not separated in reality. At this, Gilson upholds Aquinas' opinion that 'being' is the first to fall on the mind but that is not to say that it is an abstract cognition. The idea behind this Thomistic proposition is that the first is always the sensible perception.[211]

209 See É. Gilson, *Being and Some Philosophers*, 202.

210 See É. Gilson, *Being and Some Philosophers*, 205.

211 See É. Gilson, *Being and Some Philosophers*, 203–204.



The object of this perception 'being' is immediately grasped by our intellect. Gilson explicates, by some sort of a mystery, the composite arrangement of beings is blended by *simplex apprehensio* (in the grasp of the quiddity) and judgment (through the grasp of *esse*). The direct apprehension by the knower immediately releases a dual faceted and congruent intellectual operation. At the same instance the knower grasps 'what' 'is' of the given object and, then, judges simultaneously 'that' the object 'is'. The immediate recomposition of the existence and essences of the objects is an affirmation of the real constitution of the said objects. This intermix is expressed with a language; it implies that the object, instead of being merely experienced, becomes an intellectually known reality.[212] In this way, Gilson marks out the actuality of 'being' as being in an intelligible way.

In addition, Gilson maintains that what is conceivable is the essence of 'a being' and not that of 'being'. For him, if 'that which is' is the correct definition of 'being', it essentially includes an 'is', namely, 'existence'. Since every *ens*, as already mentioned, is an *esse habens*, its *esse* must be included in our knowledge of it, for its adequateness as an *ens* that is, as 'a be-ing'. If, on the other hand, our notion is not about this or that being but being in general, then, its knowledge unavoidably includes the general existence. Even this sort of a general notion also calls for the most basic of all judgments, which is 'that being is'.[213] Consequently, he suggests that the notion of an essential knowledge of being is self-contradictory because through judgment of the inclusion of *esse*, 'being' authoritatively commands immediate knowledge, thereby asserting itself. 'Being', therefore, is essentially and existentially knowable in its right.

Although *esse* is not a quiddity or a concept, it is intelligible because through judgment we establish that a thing 'is' or that it 'is not', and in *simplex apprehensio* we interpret that which is. That is why Gilson maintains that being is the first in the order of *simplex apprehensio* of concepts and the first in the hierarchy of judgment. For him, every judgment is the fruit of concepts.[214] Thus, he further assumes that even the *simplex apprehensio* of being cannot be exclusive of judgment. As anything considered as an *ens* is that of an *esse habens*, everything conceived as 'being' is also judged as an 'is'.[215] Besides, Gilson suggests that judgment is the intellect's most perfect operation because of its capacity to attain *ipsum esse*, that is, the very origin of every reality.

Moreover, Gilson submits that our knowledge of existence is necessarily that of an existing being. This explains the inherent union between concepts and

212 See É. Gilson, *Being and Some Philosophers*, 204.
213 See É. Gilson, *Being and Some Philosophers*, 204.
214 See É. Gilson, *The Christian Philosophy of St. Thomas Aquinas* (New York: Random House, 1956), 232.
215 See É. Gilson, *Being and Some Philosophers*, 209.



judgments, since there cannot be concepts without judgments or vice versa. From this proposal, we learn more from him that reality is not entirely an inexpressible mystery or a mere anthology of materialised concepts. It is, so to say, a conceivable reality that hangs on the existential act, which defies representation but is accessible to the human mind's understanding. Existence is available to us not merely by way of experience but also through any judgment of existence about being in actuality. There exists, also, an act of judgment that is beyond the classical definition of judgment, the judgment of existence that something 'is'. This is an affirmation that a subject accomplishes a trans-essential act of existing. Hence, 'being is' denotes a dual implication in the sense of, 'being is being', that yields the ultimate rule of all abstract knowledge and the most formal of every cognition, the most depleted of all. 'Being is' may also imply that, in virtue of its title 'to be', being is actual, wherein 'being', despite its general notion, becomes the fullest of all metaphysical truths, which no metaphysics can afford to overlook or undermine.[216]

The upsurge of the foregoing is that in realistic metaphysics, all knowledge is both essential and existential. Being comes first and remains there as being; it does not give way to something else. In effect, all our representations are accompanied by being. It is not just enough to say 'being'; it is such that we are hemmed in by being. A thing seen from afar is 'a being', at a closer range is 'a being', and at very proximate quarters remains 'a being', the only change is the successive determination of that being.[217] Subsequently, where there is no actual existent being to respond to the knowledge of being, there is no knowledge in that presupposition. Hence, as Aquinas suggests, being is not just the initial and original object of the intellectual knowledge; it is the cognition into which every other knowledge resolves.[218]

Actually Gilson's fundamental belief on existence presupposes the non-reality of the concept of existence. However, Gilson's views on existence about concepts may seem somewhat contradictory throughout the years of his development of the idea. We shall not delve into this argument in order not to lose our focus on selected views on the act-of-being.

### *A.4.3 Fabro's View on Ontological Unity between Abstraction and Intuition*

The preceding examination on the act-of-being from Gilson's standpoint leads us into another reflection on Fabro's approach. We shall be brief since Fabro's theme is a constituent part of our foregoing discourse. Some elements of his views have been reflected on, especially, in 'Abstractive Intuition' above. Hence,

216 See É. Gilson, *Being and Some Philosophers*, 209.
217 See É. Gilson, *Being and Some Philosophers*, 205.
218 *De Ver*, q. 1, a. 1: "Illud autem quod primo intellectus concipit quasi notissimum, et in quod conceptiones omnes resolvit, est ens."

we intend to avoid repetitions and consider crucial features of his hypothesis not represented previously. Stemming from Fabro's assumption on what he thinks is Aquinas', according to the true principles of philosophy as considered by Aristotle,[219] Fabro confirms that there is a substantial natural union between the soul and the body. This notion simply leads to the main idea about the existent natural relationship between the sense and the intellect. It consolidates the reason for the acceptance of knowledge of singular things in the intellect just as in the senses. For Fabro, following this acknowledgement, we can establish a natural collaboration and mutual subordination between the sense and the intellect and between the phantasm and the idea. This implies that the universal as well as the singular has something to do with both organs in mutual interdependence. The sensitive organ with its singularity could have been abandoned as useless because of its contingency as non-rational if not sustained by the universal. Likewise, the universal would have been absurd and ontologically empty if not attached in some way to the singulars of the senses. The signification is that the intellect reinforces the senses and is not independent of the material furnished by the senses.[220]

According to Fabro, the human universal, such as the phantasm, remains intrinsically inadequate with respect to objective and valid knowledge if uninformed by the senses. However, through *conversio* of the intellect to the senses, which is necessary in every process of intellection, the inadequacy is removed within the human limits. The encounter between the intellect and the sensitive organs, and between the universal and the phantasm is very beneficial; and so, is the only salvific way. Based on this fact, it is very inappropriate to present the Thomistic notion of abstraction as a flight from the concrete. In reality, the universal of Aquinas is directed mainly to and founded in the actual reality. It is then inaccurate to think of *conversio ad phantasmata* as a humiliation, a constraint that the mind is subjected to put up with. Conversely, the mind's turning to the phantasms is a sign of the immediate embrace needed for an integral act of knowledge.

Fabro establishes a mutual proximity between the Thomistic metaphysics and logic. However, this metaphysics is realistic because the intellect rises to its objects by way of natural continuation with the senses. For Fabro, it is only through *conversio ad phantasmata* that the intellect so united, comes to participate in the intuitive instance of the same act. As such, there is an 'intellectual intuition' for which, indirectly, it is sufficient to make a safe reference, a *status in quo* in objectivisation. This 'intuition' of the human mind in dependence on the senses, is what Fabro, in line with Garrigou-Lagrange, regards as 'abstractive intuition'[221]

219 *De Spiritualibus Creaturis*, a. 3.
220 See C. Fabro, *Percezione e pensiero*, 265–266.
221 See R. Garrigou-Lagrange, *Le sens commun, la philosophie de l'être et les formules dogmatiques* (Paris: Desclée, 1922), 26.



or 'derived intuition' or even 'implicit intuition' after M. de Petter. According to Fabro, the three terminologies correspond in signification, since it is an implicit intuition in the process of abstraction and not of itself except from both entities (the senses and the intellect).[222]

Additionally, this 'intuition' is founded on the Thomistic view that there is *continuatio* between the intellect and the phantasms.[223] Being the phantasm, the realisation of this perceptive pattern is through the cogitative under the direction of the intelligence. Hence, one can grasp how the intellect could have an immediate contact with the first substance, albeit, indirectly. This 'concrete intuition' is accompanied in the intellect by a corresponding imperfect intuition, which is founded on it (that is, *epagôgé*) of the first intelligible contents as is evident in what we classify as being. Further, according to Fabro, just as the first intuition establishes an immediate 'spirit and matter' contact, so also the second intuition accomplishes a form of an Aristotelian 'contact' with the human intelligence that belongs appropriately to angelic nature. Accordingly, these twofold sorts of intuitions are part of our nature as humans and should be developed.[224] However, the way of modern man subverts this natural blend as seen in Kant. There is need, therefore, to rethink the modern thought about intuition in various models.

### *A.4.4 An Evaluative Résumé on the* Primum Cognitum

Thus far, the debate constituted by variant nuances of interpreting Aquinas on the act-of-being demonstrates many sides of the same reality. Each Thomist represented has something interesting articulated about 'being in act'. Most Thomists have emphasised in different ways that being (*ens*) comprises the act of being and the *esse* or the existence. We find the articulation very important, and they are all cogent to our study. However, although *ens* is real and has a lot to do with existence, we desist from the temptation to give it away under the cover of existentialism. At the same time, we avoid most importantly the attempt of essentialists or the perspective principally represented by Aertsen in depicting being in actuality, as simply the fruit of *simplex apprehensio* without implicit judgment.[225] Though Aertsen's submission is very incisive, we think he

222 See C. Fabro, *Percezione e pensiero*, 266–267.
223 See *De Ver*, q. 10, a. 5.
224 See C. Fabro, *Percezione e pensiero*, 267.
225 As we mentioned earlier, we did not discuss every perspective involved in the debate because of space, otherwise we shall not conclude on our findings. Nonetheless, we mentioned some crucial points in a given Thomist whose approach we wish to underline in the course of our investigation. One such scholar is Aertsen. For further details on this discourse, see J. A. Aertsen, *Medieval Philosophy and the Transcendentals*, 177–184 esp. 180.

missed out on the existential aspect of this Thomistic notion. Moreover, with the proposal of Aertsen, although he was right in asserting that the first instance of the knowledge of being is simple apprehension, we think he left out another vital feature articulated by Velde,[226] which is implied in all the Thomistic propositions overtly or subtly. His assumption that being is affirmed in simple apprehension does not include the subsistent element that brings being into being, as such, otherwise, 'being' cannot be known. The truth about being even in the first confused apprehension is that being is self-communicating to the mind that grasps it at the first immediate abstractive intuition of the sensitive perception with implicit *judicium*.

As Aquinas explicates, being derives its signification from the act of being (*actus essendi*). This is to say, in accord with Aquinas, that being is that which is and which participates in the act of being. This being (*ens*) includes the Thomistic notion of an *id quod est*, which implies the essence and the act of being through which something 'is' and is known 'to be'. Even though the main significance of *esse* is in its reality, the actuality is constantly from a determinate act and an *esse* through which something possesses being (*esse*). Subsequently, being (*ens*) is the realistic whole that has, as its components, essence and *esse*, the content and the act. Being, therefore, is not just an essence with the addition of actual existence. 'It subsists'; this third element is important for its reality or else it would not 'be'. The subsistent element of being is the actual unification of the act of being with the essence. Hence, being is incomplete without the determinate constituent (essence), the actual being (*esse*), and the subsisting factor. This is what Velde implies by the structure of being.[227] Back to our sample authors: all pointed to the truth of the essence and *esse* but little or nothing is said about the subsisting element in which being thrives as being, otherwise it would not be. This element for us is the component we consider as novelty in our analysis of the act-of-being, that is, the joint notion of the three elements in *ens* to make it what it is (an *ens*). For the human mind to grasp being in the second explicit judgment, the three elements must be involved in the apprehension of the reality of 'being as being'. Even in what we classify as a confused knowledge at the first stage, *ens* is *ens* and holistic, therefore, the elements are not separated from it at that instance. The next step of cognition with an elaborate judgment only brings clarity into the notion of 'being' about the *subsistentia-essentia-esse*, (SEE in our terminology). Thus, the mind does not grasp the

226 See R. A. te. Velde, *Participation and Substantiality in Thomas Aquinas* (Leiden; New York; Köln: E. J. Brill, 1995), 201. Velde depicts this idea succinctly as follows: "The character of *subsistentia* pertains to the concrete essence which has being in such a way that it appropriates it to itself and consequently subsists in its being. In other words: subsistence expresses the unity of the essence with its being."

227 See R. A. te. Velde, *Participation and Substantiality in Thomas Aquinas*, 201.



essence of being first and, then, later, affirm the act of being and the subsisting element. Instead, in form of a confused thought, the intellect acknowledges that *ens* 'is' but in the next instant of verbalised *compositio et separatio*, the mind gives a name to 'that which is.'[228]

Subsequently, the polemics notwithstanding, we affirm that reality 'is'. If *ens* 'is', it solicits cognition by the intellect, and the cognition is done under the auspices of fundamental, *quasi* innate judgmental elements, the first principles. Consequently, there is a markedly co-existential interconnectedness between *ens, nous*, and *principia prima*. Nonetheless, to know *ens* as *ens*, as the *primum cognitum* in line with Aquinas, entails, as we reflected in our opinion above, the first instance of human cognition and a blend of implicit judgment. Accordingly, 'to know' any reality involves the three notions, *nous* (intellect), *ens* (being), and *principia prima* exemplified in the PNC. Hence, part of our novelty about the dynamic notion of 'being' is to demonstrate that there are three fundamental principles. First, we have *nous* (intellect), which is the principle of cognition, because from it arises any knowledge in reality. Secondly, there is *ens* (being), the fundamental principle in reality because everything 'is' and, thirdly, are *principia prima* (first principles typified in the PNC), which are the foundations of any real judgment and are correlative with and parallel to *ens*.

Conclusively, we maintain that *ens* is always dynamic and represents a habitual innovation of the *nous*. Therefore, Aquinas' subtlety is well brought out in the arguments on the notion of *ens*. We think that if one wishes to understand Aquinas' holistic view on the act-of-being, there is need to read him in context. One has to take into account most of the Thomistic commentaries on the first concepts of the mind to interpret him accordingly. Thus far, Sanguineti's views on the act-of-being have been reflected. To check redundancy, we will use a schematic sketch on his principal ideas, especially on areas pertaining to *nous et ratio* to represent his novel approach to *ens*. Besides, with the diagram below, we wish to illustrate and represent our progressive understanding of the standard Thomistic notion on the first concepts of the mind. We reiterate that the intellect is an entity with many capabilities. In trying to grasp the first reality, starting with the intuitive function, *nous* in a generative manner penetrates in a confused way the reality at the first instance through data from sensible perception without *verbum*. It moves on immediately to *ratio* for real verbal concepts through explicit judgment, thereby, composing and dividing. In this way *ens* and notions like *principia prima* are known explicitly.

228 On the judgment of the intellect about 'that which is' as a product, not of simple apprehension but of a specific judgment; namely, separation– See H. D. Gardeil, *Introduction to the Philosophy of St. Thomas Aquinas: IV Metaphysics* (St. Louis (MO); London: B. Herder Book, 1967), 67–68.

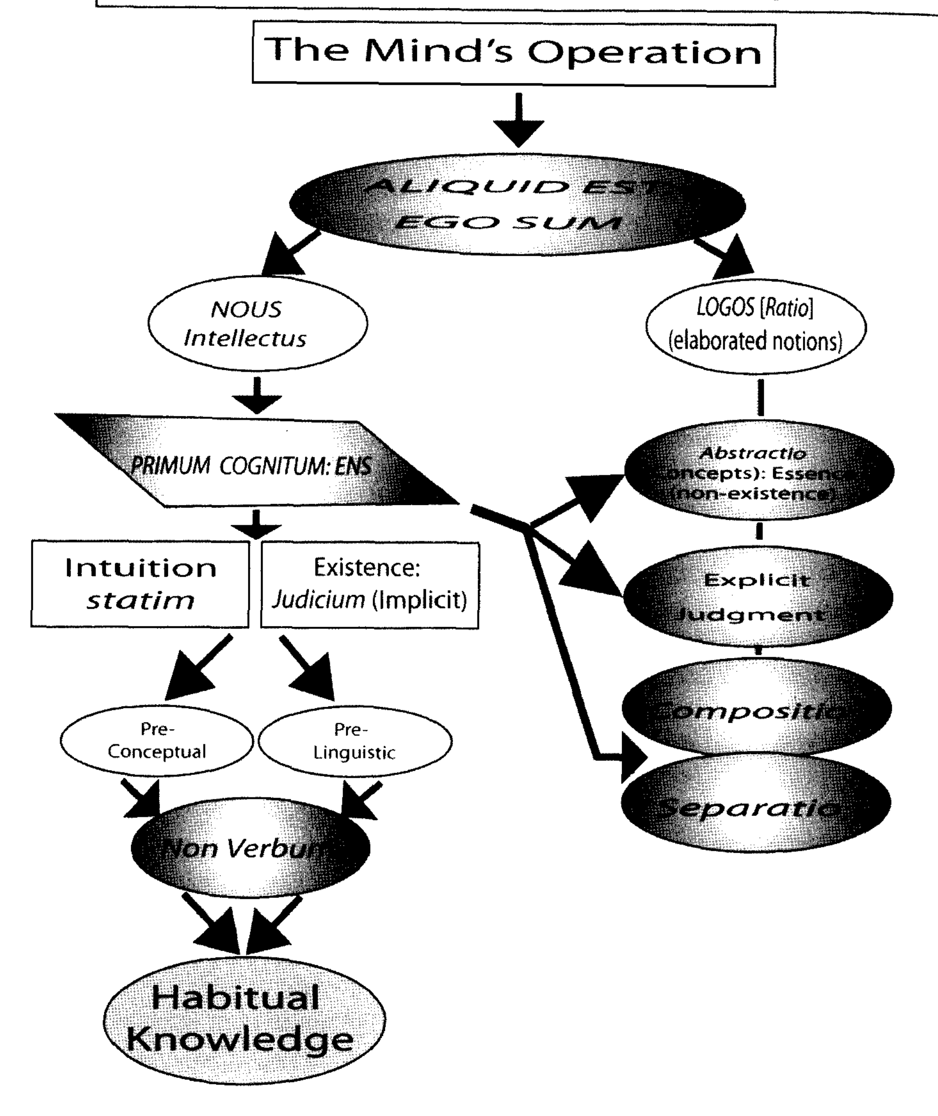



Figure 3.



## B. Transcendental Notions

### *B.1 Transcendental Foundations*

The foregoing discourse and the schematic representation demonstrate that 'being' is and remains at the fore as the intellectual *primum cognitum*. There is, therefore, a natural progression of logical sequence from the preceding analysis. Without reducing the metaphysical insight to a logical consideration, we introduce the transcendentals as relations to 'being' proper to metaphysics. What is, then, a transcendental in the Thomistic context? Our implication by a transcendental notion, in line with Renard, is, that which is predicable not merely of the individual (which applies to universals) but also of every differentiation applicable from individual to individual.[229] *Ens* as a notion depicts just this characteristic, because the unity of the concept of transcendentals is not like that of a perfect unity, as in a universal. Besides, the Thomistic notion of the transcendentals shows that they are properties of being which signify the same concept under different aspects.[230] Hence, as Aquinas suggests, 'being' cannot be and is not a genus.[231] If, therefore, *ens* is obviously one and the first notion to fall on the mind, what about the other related notions? From the notion of *ens* is the 'immediate' deduction that 'being' is one; it is unity, it is true, it is good, and it manifests itself in multifarious forms and remains beautiful.

Accordingly, the nature of our present investigation confronts us with another question about the realistic character of being. To simply assert that being is a transcendental notion leaves us with a myriad of problems. The immediate of such problems solicited by the transcendental nature of being, are 'abstraction'[232] and 'predication'. Can 'being' be really abstracted from every reality and yet remain predicable of all that is real? We suggest that the path to the solution is the awareness that being (*ens*) is a transcendental notion since it involves an indefinite unit of every reality. Moreover, being is an analogous notion, it is one but not in a perfect manner. This implies that whenever *ens* is mentioned in any reality,

229 See H. Renard, *The Philosophy of Being* (Milwaukee (WI): Bruce Publishing Company, 1950), 82.

230 See L. Elders, *The Metaphysics of Being of St. Thomas Aquinas*, 60.

231 *In I Metaph*, lect. 9: "Sed in hoc decipiebantur, quia utebantur ente quasi una ratione et una natura sicut est natura alicuius generis; hoc enim est impossibile. Ens enim non est genus, sed multipliciter dicitur de diversis. Et ideo in primo physicorum dicitur quod haec est falsa, ens est unum: non enim habet unam naturam sicut unum genus vel una species.

232 As H. Renard rightly proposes, the abstraction of the notion of being differs from that of a universal, of a genus, which results from perfect unity, because being is a transcendental notion. Actually, the unity of *ens* is so imperfect that it is supposed to have an actual but indefinite content of all beings. See H. Renard, *The Philosophy of Being*, 83.

there is need for a readjustment from within for a contextual application.[233] Again, in 'being' (*ens*), as Aquinas portrays, nothing is added or can be added as such; the only addition, as Elders establishes, is making more explicit the content of being. In this regard, notions of universal modes consequent on being can be added to *ens* without any alteration in the notion of *ens*.[234]

Transcendental notions, therefore, are born out of the structure of metaphysics because the latter studies 'being as an act' and all that is consequent on 'it'. For this reason, metaphysical realists agree with the suggestion of Aristotle that "it is the function of the philosopher to be able to investigate all things."[235] The metaphysician, as well as the logician, considers 'being' but from different perspectives. In this respect, as Aquinas also recognises, there is an affinity between the metaphysician and dialectician.[236] Aquinas, in his commentary on *Metaphysics*, further explains Aristotle's distinctions between dialectic and philosophy. Aquinas rightly distinguishes between being of reason (*ens rationis*) and being in reality (*ens naturae*). While logic deals with rational concepts of *communia*, as in intentions of genus and species, as they extend to all things, metaphysics examines the real 'being'. Thus the metaphysician, like the logician, studies being since it is a common-to-all notion; however, the metaphysician's approach is different because he/she studies *ens* as presented in reality in an attempt to a resolution with the things in themselves. Hence, metaphysics does not invent its objects of study, but discovers and speculates on the ready-made being in the universe.[237]

Consequently, being (*ens*) is absolute in the first cause. In all other things (realities), there is 'being', not as absolute, but shared as a participated act. On account of this, everything (every reality) is 'being'. It is predicable of all things. Hence, being cannot be restricted to any of the Aristotelian categories, because it goes 'through' and extends 'beyond' all the categories to their first cause. In this sense, 'being' is said to 'transcend' every category. And so, being is a transcendental predicate. The use of this word 'transcendental' dates back to the sixteenth century; nonetheless, 'transcendent' had been in use for the same notion since the thirteenth century.[238] Actually, transcendental has a standing philosophical

233 See H. Renard, *The Philosophy of Being*, 82–83.

234 See L. Elders, *The Metaphysics of Being of St. Thomas Aquinas*, 61.

235 *Met*, IV, 1004b 1.

236 *In VII Metaph*, lect. 3: "Haec scientia habet quandam affinitatem cum logica propter utriusque communitatem." *In De Trin*, q. 6, a. 1: "Utraque scientia communis est et circa idem subiectum quodammodo."

237 See *In IV Metaph*, lect. 4; See also *In I APst*, lect. 20, n. 5; See also R. W. Schmidt, *The Domain of Logic according to Saint Thomas Aquinas* (The Hague: M. Nijhoff, 1966), 42–45.

238 See L-M. Régis, *L'odyssée de la métaphysique* (Montréal: Institut d'études médiévales, 1949), 39. For details on the origins of the study of the transcendentals by the schoolmen, see H. Pouillon, "Le premier traité des propriétés transcendentales," in *Revue néoscolastique de philosophie* XLII (1939), 40–77.



implication, that is, what is beyond the empirical experience; however, its significance, in this context, is dissimilar to the established meaning. In the present application, it connotes the characteristics of all things through and across the Aristotelian categories. Following this import, being is predicated of all things transcendentally.[239]

Everything, to the extent that it has 'being', possesses these transcendentals in their own right. Accordingly, Twomey suggests that reality is demonstrated to be foundational (which implies that being possesses a richness) because of these several notions. Further, it is another way of laying emphasis to the authentic objectivity in human knowledge. Even with these varied notions, 'being' is unchangeable because nothing is added to it. However, the metaphysician is transformed by way of growth through the knowledge of the transcendentals.[240] What then, allows the predication of transcendence for all reality as 'being' (*ens*)? *Ens* 'is' and remains diverse in every instance; yet, in finite beings, it exerts a potency that is proportionally even to all things. This potency is the essence, the power to 'be', which is specific to each kind of being. In this notion, *ens*, anything is knowable, because it has overcome (transcended) every category of being (being so-and-so). 'Being', therefore, is predicated of every reality in the cognitional and real order, and in the concrete as well as in the abstract order. Aquinas demonstrates in the doctrine of transcendentality the modes belonging to every *ens*. The notion of transcendentality and the problem of addition, at the transcendental level, are two major features of this Thomistic doctrine.[241] According to Aquinas, from the point of view of their extension, the transcendentals are common to every reality; and, so, they are *maxime communia*.[242] On the other hand, considered from the standpoint of the resolution of knowledge, they are the first conceptions of the intellect. The word *transcendentia* does not often appear in Aquinas' works. As Aertsen observed, Aquinas does not use the word *transcendens* in some of his basic works but he uses it in *De Veritate*.[243] Aquinas employs this word in few places, mainly, in the discourse pertaining to *multitudo*.[244]

239 See J. Owens, *An Elementary Christian Metaphysics*, 111.

240 See J. E. Twomey, *The General Notion of the Transcendentals in the Metaphysics of Saint Thomas Aquinas* (Washington, (DC): The Catholic University of America Press, 1958), xiii.

241 See J. A. Aertsen, *Medieval Philosophy and the Transcendentals: The Case of Thomas Aquinas*, 91.

242 *In Boethii de Hebdomadibus* lect. 2: "Ea autem quae in omni intellectu cadunt, sunt maxime communia quae sunt: ens, unum et bonum."

243 See *De Ver*, q. 21; See also J. A. Aertsen, *Medieval Philosophy and the Transcendentals: The Case of Thomas Aquinas*, 91.

244 See *De Ver*, q. 21, a. 3; *In I Sent*, d. 2, q. 1, a. 5, ad 2 (as *res*); *In II Sent*, d. 34, q. 1, a. 2, ad 1 (as *bonum et malum*); *ST*, I, q. 30, a. 3 (twice as *multitudo*) ad 1 (as *unum*) and ad 2 (as *multitudo*); *ST*, I, q. 39, a. 3, ad 3 (as *res*); *ST*, I, q. 50, a. 3, ad 1 (as *multitudo*); *ST*, I, q. 93, a. 9 (as *unum*); *De Spiritualibus Creaturis*, prooem, a. 8, ad 15 (as *multitudo*), *In III Phys*, lect. 8, n. 4 (as *multitudo*) and lect. 12, n. 5 (as *multitudo*); *De Virtutibus*, q.1, a. 2, ad 8.

### *B.2 Derivation of the Transcendentals*

The preceding gives us a clue into the inquiry about the derivation of the transcendentals. The metaphysician, in an attempt to know the notions consequent on *ens*, conforms, as it were, to 'being'. This is the basis of the metaphysician's detection and the origin of the delineation of the hierarchy of being, the many facets (notions) in which 'being' is present.[245] Aquinas describes in a number of places in his works how transcendentals are derived, that is, an explanation of the determination of *ens* by other *communia*. In *De Veritate*, for instance, Aquinas carefully organises the exposition about these derivations (intellectual concepts). One can easily detect that Aquinas' leading principle is either that the mode of being is relevant to every reality in itself (*in se*) or in relation to another thing (*ad aliud*).[246] There are further subdivisions of the first group of transcendentals, because every being can simultaneously admit of an affirmation and denial. On a positive note, 'being' can be said to have certain content and an essence which is expressible as 'thing' (*res*). The major difference between the notion 'being' and 'thing' is one that gives precedence to *ens* by the fact that being is derived from the act of being (*actus essendi*) while 'thing' is not. *Res*, on the other hand, expresses the 'quiddity' (whatness) of any reality. Aquinas, then, posits what he considers as the '*ratio*' of being; that is, that a reality is being (*ens*) and is so called through the act of 'being' (*esse*). From a negative perspective, every being is said to be whole and undivided. This is expressed as 'one' (*unum*) since 'one' is nothing but an *ens indivisum*.[247]

Pertaining to the second relational group of transcendentals, Aquinas again makes a subdivision. Relationship between one 'being' and another is viewed according to their division and expressed, subsequently, as 'something' (*aliquid*). This name implies "some other what" (*quasi aliud quid*). Aquinas explains further that it expresses the content and concept of the 'one', since it is undivided 'in itself' but 'divided' from others. This second part of division contains the notion, *aliquid*, which is that 'being' is 'something' as long as it is divided from others.[248]

245 See J. E. Twomey, *The General Notion of the Transcendentals in the Metaphysics of Saint Thomas Aquinas*, xiii.

246 See H. Seidl, "Die aristotelischen Quellen zur Transzendentalien-Aufstellung bei Thomas von Aquin, De Veritate, q. 1, art. 1," in *Philosophisches Jahrbuch* 80 (1973), 166–171.

247 *De Ver*, q. 1, a. 1: "Si primo modo, hoc est dupliciter quia vel exprimitur in ente aliquid affirmative vel negative. Non autem invenitur aliquid affirmative dictum absolute quod possit accipi in omni ente, nisi essentia eius, secundum quam esse dicitur; et sic imponitur hoc nomen res, quod in hoc differt ab ente, secundum Avicennam in principio metaphys., quod ens sumitur ab actu essendi, sed nomen rei exprimit quidditatem vel essentiam entis. Negatio autem consequens omne ens absolute, est indivisio; et hanc exprimit hoc nomen unum: nihil aliud enim est unum quam ens indivisum."

248 *De Ver*, q. 1, a. 1: "Si autem modus entis accipiatur secundo modo, scilicet secundum ordinem unius ad alterum, hoc potest esse dupliciter. Uno modo secundum divisionem unius ab altero; et hoc exprimit hoc nomen aliquid: dicitur enim aliquid quasi aliud quid; unde sicut ens dicitur unum, in quantum est indivisum in se, ita dicitur aliquid, in quantum est ab aliis divisum."



We highlighted these notions as part of the transcendentals; nevertheless, we avoid an extensive discourse on them, because they do not constitute part of our major focus in this research. We will now examine in more detail the notions of *multitudo, verum,* and *bonum* because of their immediate link to our inquiry.

#### *B.2.1 A Note on* Multitudo *as a Transcendental*

The notion of 'multitude', which entails more than one being, consists of some beings in reality which, on a separate consideration, depicts itself undivided and distinct from others but, on a consideration as a group, constitutes an object of thought. For this reason, as Mercier suggests, the notion of *multitudo* or manifold is obviously distinguished from 'unity', since many beings are actually apart from one being in reality. Hitherto, as the intellect is not in the habit of a representation of 'multitude' of things, in order to get their concept, it unites them under one umbrella, in such a way that, though 'materially' multiple, they are formally 'one'.[249]

The notion of being, therefore, bespeaks an undivided being as 'one', which is the implication of the Thomistic proposal about the transcendental *unum*, that is, *ens indivisum*; in addition, it carries with it another connotation. As Aquinas observes, by way of privation, *unum* is opposed to *multitudo* because the idea of many has the import of division. As a result, the idea of 'division' suggests an apparent priority to 'unity', not absolutely, but in the order of human apprehension. This is because the human intellect is structured in a way that it apprehends first the simple things through the complicated ones. Hence, the notion of *multitudo* follows on the transcendental *unum* since, with the modality of human understanding, the intellect does not comprehend division as a plurality unless by its ascription of 'unity' to each part. Based on this fact, *ens* as 'one' is necessarily in the definition of 'multitude' and not vice versa. Thus, Aquinas delineates that from this negation of being comes the apprehension of division. Consequently, *ens* is apprehended first; secondly, follows the negation that 'this' *ens* is not 'that' *ens*, that is, by implication, a division; thirdly, comes the idea of 'one' and, fourthly, the concept of '*multitudo*'.[250]

249 See D. J. Mercier, *A Manual of Modern Scholastic Philosophy* (London; St. Louis (MO): Kegan Paul, Trench, Trübner and Co., 1938), 455.

250 See *ST*, I, q. 11, a. 2, ad 4: "… Unum opponitur privative multis, inquantum in ratione multorum est quod sint divisa. Unde oportet quod divisio sit prius unitate, non simpliciter, sed secundum rationem nostrae apprehensionis. Apprehendimus enim simplicia per composita, unde definimus punctum, cuius pars non est, vel principium lineae. Sed multitudo, etiam secundum rationem, consequenter se habet ad unum, quia divisa non intelligimus habere rationem multitudinis, nisi per hoc quod utrique divisorum attribuimus unitatem. Unde unum ponitur in definitione multitudinis, non autem multitudo in definitione unius. Sed divisio cadit in intellectu ex ipsa negatione entis. Ita quod primo cadit in intellectu ens; secundo, quod hoc ens non est illud ens, et sic secundo apprehendimus divisionem; tertio, unum; quarto, multitudinem."

Furthermore, the realistic notion of 'being' in the universe, as Sanguineti suggests, is one but consists of a plurality; that is to say, the notion of "unity in multiplicity"[251] is clearly brought out in the notion of *ens*. The question of multiplicity attracts our interest in this study, because of its propinquity to our main investigation. As Aquinas fittingly portrays in the notion of multiplicity explicated above, the concept of reality is obtained by composition. In accord with Sanguineti, the said knowledge begins with our experience of many ambits of reality.[252] Consequently, our understanding of multiplicity comes first, followed by the unity that integrates the scope of this multiplicity. Nonetheless, if we abandon the argument here, we may not fully grasp the Thomistic notion for the placement of the transcendental notion of *unum* before *multitudo*. What, therefore, is first to be apprehended by the human mind? The response is largely dependent on our view of plurality, aware of the fact that reality does not admit of any subjectivity and that, in being, there is no vicious circle, as Aquinas also affirms.[253]

Therefore, if we intend multitude as a totality of unity, it is apparent that unity is the first known. If, however, we consider unity as an absence of multiplicity, as a whole without the many, the reverse will apply. The reason is that, although in the order of reality unity is first, in respect of our sensible perception, we understand confused *multitudo* of objects. Hence, Aquinas submits that multiplicity is more sensitive than unity.[254] And again, according to him: "*multitudo* precedes unity objectively, as the whole precedes its parts and the composite precedes the simple: but unity precedes 'multitude' naturally and according to reason."[255] The Angelic Doctor maintains further that it is apparently not enough that unity is opposed to multitude privatively. The reason is that privation logically is an afterthought because, for the apprehension of a privation, there is need for understanding its opposite, so to say, the origin of its definition. Hence, Aquinas asserts:

> It would be better then to say that division is the cause of number and precedes it logically; and that one since it is undivided being is predicated privatively in relation to division, but not in relation to multitude. Hence division logically precedes being but number follows it: and this is proved as follows. The first object of the intellect is being; the second is the negation of being. From these two there follows thirdly the understanding of distinction (since from the fact that we understand that this thing is and that it is not that thing we realize that these two are distinct): and it follows fourthly that the intellect apprehends the idea of unity, in that it understands that this thing is not divided in itself; and fifthly the intellect apprehends number, in that it understands this as distinct from that and each as one in itself. For however much things are conceived as distinct from one another, there is no idea of number unless each be conceived as one.[256]

251 See J. J. Sanguineti, "La unidad y multiplicidad del universo," in *Anuario filosófico* XII (1979), 135–170, 153.

252 See J. J. Sanguineti, "La unidad y multiplicidad del universo," 153.

253 See *De Pot*, q. 9, a. 7, ad 15.

254 See *In X Metaph*, lect. 4.

255 *De Pot*, q. 9, a. 7, ad 15: "Multitudo est prior uno secundum sensum, sicut totum partibus et compositum simplici; sed unum est prius multitudine naturaliter et secundum rationem." [Trans mine].



The above Thomistic excerpt succinctly depicts that the transcendental notion of multitude is subsequent on the notion of being. This implies that multitude flows from the negation of being through the idea of division (distinction), and as a sort of an afterthought from 'unity'. In human perceptive condition, what comes to the mind immediately is the notion of *ens*; as soon as that happens, then comes the intellect's realisation from sensible experience that a thing 'is' or that it 'is not', which is the immediate apprehension of non-*ens* as we shall ascertain in due course.

This contraposition between 'being' and 'non-being' on the basis of 'multitude' of observable things in reality gives way to a third step in our consideration of the 'many'. The notion of *ens* and *non-ens* introduces the concept of multitude, because to acknowledge that 'this being' is not 'that being' signifies division. The division in this context is not the same as the numerical division whereby something is divided from another but a real distinction (*separatio*) between one thing and another. It is, as Aquinas explains, a transcendental division that springs from contradiction. Consequently, Aquinas illustrates that the presupposed 'division' in the concept of 'one' that is convertible with *ens* is not the division of continued quantity that has to do with the 'one' as the principle of numbers, but which implies the division that is caused by contradiction, according to which this being is not that being.[257]

On the other hand, we can take a step further in the intellection of which *ens* is *unum*. Having understood the implication of the division that O is not P, through this apprehension we come to the reality that O is not divided from within. In this way, we can simultaneously affirm that unity implies an indivision of *ens* (*ens indivisum*). At this fifth stage, we reflect back to the notion of the individual *ens* so as to correlate it with the external reality that surrounds it, which we already separated. In this way, as if trying to form a synthesis between the concept of division and unity, we apprehend the *multitudo* of *ens*, the repetition of unity which simultaneously bespeaks the internal indivision of everything, and its division in respect to other things.[258] Subsequently, as Aquinas suggests:

> Accordingly then, while one adds to being one negation inasmuch as a thing is undivided in itself; plurality adds two negations, inasmuch as a

256 *De Pot*, q. 9, a. 7, ad 15.

257 See *In X Metaph*, lect. 4.

258 See J. J. Sanguineti, "La unidad y multiplicidad del universo," 155.



certain thing is undivided in itself, and distinct from another; that is one of them is not the other.[259]

Thus, conclusively with the Angelic Doctor we recap that:

> The first object of the intellect is being; the second is the negation of being. ... For however much things are conceived as distinct from one another, there is no idea of number unless each be conceived as one. Wherefore there is not a vicious circle in the definitions of unity and number.[260]

### B.2.2 *A Synopsis on* Verum *and* Bonum *as Transcendentals*

Aquinas demonstrates further a major positive relational mode of *ens*, that is, the conformity (*convenientia*) of one being to another being. The prerequisite for this conformity is a spiritual entity, the soul that we mentioned earlier, which is by nature capable of conformity to every being (reality).[261] This correspondence can be regarded as the amplification and consequence of the *resolutio* to the first intellectual conception. Thus, 'being' as the first known is the proper object of the intellect. The Thomistic expression of correspondence of the soul to being is an implicit explication found in the proposal that 'being' (*ens*) is the first known. Since there are two faculties in the soul, the cognitive and the appetitive faculties, the correspondence (*convenientia*) is twofold. The 'good' (*bonum*) expresses the appetitive conformity to being, while 'true' (*verum*) expresses the intellect's correspondence to being.[262]

259 *De Pot*, q. 9, a. 7: "Et sic, cum unum addat supra ens unam negationem, – secundum quod aliquid est indivisum in se, – multitudo addit duas negationes, prout scilicet aliquid est in se indivisum, et prout est ab alio divisum. Quod quidem dividi est unum eorum non esse alterum."

260 *De Pot*, q. 9, a. 7 ad 15: "Quod sic patet: primum enim quod in intellectum cadit, est ens; secundum vero est negatio entis; ex his autem duobus sequitur tertio intellectus divisionis (ex hoc enim quod aliquid intelligitur ens, et intelligitur non esse hoc ens, sequitur in intellectu quod sit divisum ab eo); quarto autem sequitur in intellectu ratio unius, prout scilicet intelligitur hoc ens non esse in se divisum; quinto autem sequitur intellectus multitudinis, prout scilicet hoc ens intelligitur divisum ab alio, et utrumque ipsorum esse in se unum. Quantumcumque enim aliqua intelligantur divisa, non intelligetur multitudo, nisi quodlibet divisorum intelligatur esse unum. Et sic etiam patet quod non erit circulus in definitione unius et multitudinis."

261 Aristotle says the human soul is, in a way, all things. (*De Anima* 431b 21); *De Ver*, q. 1, a. 1: "Alio modo secundum convenientiam unius entis ad aliud; et hoc quidem non potest esse nisi accipiatur aliquid quod natum sit convenire cum omni ente: hoc autem est anima, quae quodammodo est omnia, ut dicitur in III de anima."

262 *De Ver*, q. 1, a. 1: "In anima autem est vis cognitiva et appetitiva. Convenientiam ergo entis ad appetitum exprimit hoc nomen bonum, ut in principio ethic. Dicitur quod bonum est quod omnia appetunt. Convenientiam vero entis ad intellectum exprimit hoc nomen verum."



#### a. *Aquinas' Transcendental Notion of* Verum

Truth, as we indicated previously in our preceding discourse,[263] is conformity of the intellect with reality. Aquinas considers truth as *adaequatio* at every level of the investigation of truth, because of its identity with being in conformity with intellect.[264] Aquinas also discusses the notion of *verum* in his varied works, beginning from those of his youth. In most of his first works, he maintains the Aristotelian line of thought, by presenting truth as *adaequatio*, (*convenientia, corrispondentia*) which the intellect has in confrontation with the being (*esse*) of things. Nonetheless, the Angelic Doctor advanced from this through a combination of metaphysical insights. According to Aquinas, truth is an *adaequatio* of the intellect and the thing. This is to say that the Thomistic conception of truth is that the intellect is made for truth. This is brought out fully in his *Commentary on the Sentences*.[265] The Thomistic notion of truth further evolved to a connection of the act of judgment with the act of being (*actus essendi*), that is, to an ontological level, the establishment of every finite truth or participated truth in the infinite and unparticipated truth, namely, God.

Further, Aquinas portrays that truth is a fundamental exigency of the intellect. Truth is its specific and proper end. It is only when the intellect arrives at truth that it is satisfied. Just as the end that satisfies the will is the good, so also truth is the end that satisfies the intellect.[266] The human intellect, although it is finite, obtains truth and acquires the awareness of truth. The fundamental character of truth is depicted by Aquinas in its grounding in the intellect. The real object is 'reality' as 'it is' and that is why Aquinas with a perceptive insight makes a connection between the ontological truth and reality, or between being and the intellect. He also depicts that, in order to obtain the truth of things, as they are, the intellect composes and divides, and further assimilates the thing in its form, thereby, becoming the thing, in a way. By so doing, the intellect obtains true knowledge of reality. Thus, Aquinas proposes:

> In forming the quiddities of things, the intellect merely has a likeness of a thing existing outside the soul, as a sense has a likeness when it receives the species of a sensible thing. But when the intellect begins to judge about the thing it has apprehended, then its judgment is something

263 See our discourse on "Sensory Knowledge and Truth" in this chapter.

264 *In I Sent*, d. 19, q. 5, a. 1: "Veritas est adaequatio rei ad intellectum." See also: *ST*, I, q. 16, a. 1; *SCG*, I, Ch. 59, n. 2; *De Ver*, q. 1, a. 1.

265 See *In III Sent*, d. 33, a. 3c: "Veritas autem consistit in quadam adaequatione intellectus et vocis ad rem. Et quia aequalitas est medium inter majus et minus, ideo oportet quod bonum virtutis intellectualis in medio consistat, ut scilicet dicatur de re hoc quod est. Si autem excedat vel in plus vel in minus, erit falsum."

266 See *In III Sent*, d. 33, a. 3c: "Bonum virtutum intellectualium consistit in hoc quod verum dicatur."

> proper to itself – not something found outside in the thing. And the judgment is said to be true when it conforms to the external reality. Moreover, the intellect judges about the thing it has apprehended at the moment when it says that something is or is not. This is the role of "the intellect composing and dividing."[267]

This verity according to Aquinas assumes an ontological character, because it has the property (possession) of things and, since it is the property of being (*ens*), *verum* has a transcendental value. It is the relation of correspondence between the thing and the mind. Concerning ontological truth, Aquinas shows that it is convertible with being. Accordingly, Aquinas asserts:

> Now a thing understood may be in relation to an intellect either essentially or accidentally. It is related essentially to an intellect on which it depends as regards its essence; but accidentally to an intellect by which it is knowable.[268]

Further, he supplements as follows:

> Now we do not judge of a thing by what is in it accidentally, but by what is in it essentially. Hence, everything is said to be true absolutely, in so far as it is related to the intellect from which it depends.[269]

Therefore, Aquinas suggests that: "True expresses the correspondence of being to the knowing power, for all knowing is produced by an assimilation of the knower to the thing known, so that assimilation is said to be the cause of knowledge."[270] Thus *verum* is the principle of knowledge. So the notion of *verum* in this way is equated to the principle of knowledge.

Finally, we assert that Aquinas demonstrates that truth is a transcendental property, which is parallel to being from the standpoint of the cognitive faculty. Subsequently, every being is true from the viewpoint of its knowability by the intellect. This is because every being should correspond to the idea of the fashioner (God) and because every being is intelligible. Inasmuch as every being participates in being (to be), it can be known (knowable); hence, the true is tran-

267 *De Ver*, q. 1, a. 3:"Intellectus autem formans quidditatem rerum, non habet nisi similitudinem rei existentis extra animam, sicut et sensus in quantum accipit speciem sensibilis; sed quando incipit iudicare de re apprehensa, tunc ipsum iudicium intellectus est quoddam proprium ei, quod non invenitur extra in re. Sed quando adaequatur ei quod est extra in re, dicitur iudicium verum; tunc autem iudicat intellectus de re apprehensa quando dicit aliquid esse vel non esse, quod est intellectus componentis et dividentis."

268 *ST*, I, q. 16, a. 1.

269 *ST*, I, q. 16, a. 1.

270 *De Ver*, q. 1, a. 1.



scendental, a concept convertible with being. Truth in a thing itself is the entity as it is related to the intellect or as it relates itself to the intellect.[271]

### *b.* *The Transcendental* Bonum

Aquinas aptly recapitulates the notion of the good in disputed questions on truth. According to him: "Good expresses the correspondence of being to the appetitive power, for, … the good is 'that which all desire'."[272] Therefore, we affirm that the notion of the transcendental good is closely related to the notion of ontological truth. In both cases, there is a logical relation founded on the reality of things. The idea of the good extends to everything, itself included; that 'idea' is something 'good'. In the transcendental *bonum*, *ens* relates to the will. Just as in *verum*, there is a distinction between the essential ontological *bonum* and accidental ontological *bonum*. The first, in reality, is the desirability of *ens* on the part of *ipsum esse subsistens*, that is, on the part of God who induces *ens* in actuality. This implies an essential relation without which *ens* itself disappears. The next is the desirability of *ens* on the part of the human will or any other created intelligence. This kind involves an accidental desirability, because the being (*esse*) of *ens* does not depend on our desirability. Nonetheless, in God we see the epitome of the desirability, that is, convertible on the level of *ens* with being. This kind of *bonum* generates, and is the real principle of love at all levels on which every other principle of love is built. Hence, Aquinas affirms that:

> God loves all existing things. For all existing things, in so far as they exist, are good, since the existence of a thing is itself a good; and likewise, whatever perfection it possesses. Now it has been shown above … that God's will is the cause of all things. It must needs be, therefore, that a thing has existence, or any kind of good, only inasmuch as it is willed by God. To every existing thing, then, God wills some good. Hence, since to love anything is nothing else than to will good to that thing, it is manifest that God loves everything that exists. Yet not as we love. Because since our will is not the cause of the goodness of things, but is moved by it as by its object, our love, whereby we will good to anything, is not the cause of its goodness; but conversely its goodness, whether real or imaginary, calls forth our love, by which we will that it should preserve the good it has, and receive besides the good it has not, and to this end we direct our actions: whereas the love of God infuses and creates goodness.[273]

271 See H. Renard, *The Philosophy of Being*, 178–179.

272 *De Ver*, q. 1, a. 1.

273 *ST*, I, q. 20, a. 2; See also *In II Sent*, d. 26, q. 1; *De Ver*, q. 27, a. 1.

Thus, being's convertibility with *bonum* is demonstrated in Aquinas as we shall further ascertain. Besides, Aquinas appositely represents the actual character of the transcendental *bonum* as follows:

> Goodness and being are really the same, and differ only in idea; which is clear from the following argument. The essence of goodness consists in this, that it is in some way desirable. Hence the Philosopher says (Ethic. i): "Goodness is what all desire." Now it is clear that a thing is desirable only in so far as it is perfect; … But everything is perfect so far as it is actual. Therefore it is clear that a thing is perfect so far as it exists; for … Hence it is clear that goodness and being are the same really. But goodness presents the aspect of desirableness, which being does not present.[274]

Therefore, *bonum* is a property of being and convertible with it. Accordingly, we can sum up that there is goodness in every being. Every *ens* as *ens* is good. The reason is that all beings have actuality and are, in some way, perfect. Since perfection implies desirability and the good, every being is good. The good further includes the notion of being,[275] that is, as a foundation for a relation to the appetite. The good, therefore, is identical with 'being' as perfective of another as an end.[276] The good, above all, adds to the notion of being a relation of reason to the appetitive faculty.[277] Nevertheless, nothing is capable of moving the appetite except if it exists or can be.

Hence, Aquinas defines the main transcendentals. We can call them formal transcendentals. Herein, the question may arise: Where are the first principles? We shall come to the answer later.

### *B.3 The Primacy of* Ens

The wisdom in Aquinas' transcendental notions is an important odyssey of thought, which he certainly might not have anticipated at the time of the proposal. Aquinas

274 *ST*, I, q. 5, a. 1: "Quod bonum et ens sunt idem secundum rem, sed differunt secundum rationem tantum. Quod sic patet. Ratio enim boni in hoc consistit, quod aliquid sit appetibile, unde philosophus, in I ethic., dicit quod bonum est quod omnia appetunt. Manifestum est autem quod unumquodque est appetibile secundum quod est perfectum, nam omnia appetunt suam perfectionem. Intantum est autem perfectum unumquodque, inquantum est actu, unde manifestum est quod intantum est aliquid bonum, inquantum est ens, esse enim est actualitas omnis rei, ut ex superioribus patet. Unde manifestum est quod bonum et ens sunt idem secundum rem, sed bonum dicit rationem appetibilis, quam non dicit ens."

275 See *De Ver*, q. 21, a. 6, ad 2.

276 See *De Ver*, q. 21, a.1: "Dicitur bonum ens perfectivum alterius per modum finis."

277 See *De Ver*, q. 21, a.1: "Verum et bonum positive dicuntur; unde non possunt addere nisi relationem quae sit rationis tantum."



demonstrates a very insightful point, which resurfaces after the Kantian (*a priori* synthesis) and Hegelian (double dialectic) deconstructive attempts. The Thomistic procedure involved is very intense and rigorous and, as Fabro suggests, possibly, represents one of the most powerful insights in the entire history of Western Philosophy.[278]

There are three major distinguishable moments from the fundamental text of this Thomistic doctrine.[279] The first moment is the emergence of *ens*, then follows its all-inclusive actuation, and lastly is its intentional extension in the univocal predicamental aspect as well as in the appropriately analogous transcendental feature. In this proposal, Aquinas first affirms the proper method of metaphysics that it is neither analysis nor synthesis but *reductio*; thus, he says:

> When investigating the nature of anything, one should make the same kind of analysis as he makes when he reduces a proposition to certain self-evident principles. Otherwise, both types of knowledge will become involved in an infinite regress, and science and our knowledge of things will perish.[280]

*Reductio* seems to be properly Aquinas' usage. It signifies more than a resolution in the sense of logical *resolvit.* Instead it implies, as Fabro proposes, a "return to the fundament."[281] Hence, Aquinas' articulation of *reductio* in *ens* is a fundamental intensive and wide-ranging process. The Angelic Doctor's sharp apprehension and accent on *reductio* in 'being' is so precise that it also forms the centrality of his transcendental doctrine. Therefore, he writes:

> Now, as Avicenna says, that which the intellect first conceives as, in a way, the most evident, and to which it reduces all its concepts, is being. Consequently, all the other conceptions of the intellect are had by additions to being.[282]

278 See C. Fabro, "The Transcendentality of Ens-Esse and the Ground of Metaphysics," 407.

279 See *De Ver*, q. 1, a. 1, the idea here is already present in the text: *In I Sent*, d. 8, q. 1, a. 3 and *In I Sent*, d. 19, q. 5, a. 1.

280 *De Ver*, q. 1, a. 1: "Sicut in demonstrabilibus oportet fieri reductionem in aliqua principia per se intellectui nota, ita investigando quid est unumquodque; alias utrobique in infinitum iretur, et sic periret omnino scientia et cognitio rerum."

281 See C. Fabro, "The Transcendentality of Ens-Esse and the Ground of Metaphysics," 407–408.

282 *De Ver*, q. 1, a. 1: "Illud autem quod primo intellectus concipit quasi notissimum, et in quod conceptiones omnes resolvit, est ens, ut Avicenna dicit in principio suae metaphysicae. Unde oportet quod omnes aliae conceptiones intellectus accipiantur ex additione ad ens." The Thomistic terminology *additio* used in this context differs substantially from the Kantian synthetic (*a priori* or *a posteriori*) notion because the Kantian synthesis posits an intellectual and sensitive knowledge 'separation', and fundamental incommunicability. On the other hand, the Angelic Doctor's signification is established and enhanced by the intrinsic relatedness and link between both.

The above-stated further shows that Aquinas perceives *ens* as the first of all the transcendentals as it is the *prima* of the 'first principles'. Everything is reduced to that which is the principle of 'being'. He additionally suggests that nothing is added, or can be added, to 'being' in the following excerpt:

> But nothing can be added to being as though it were something not included in being – in the way that a difference is added to a genus or an accident to a subject – for every reality is essentially a being. The Philosopher has shown this by proving that being cannot be a genus.[283]

Consequently, 'being' in the Aristotelian and Thomistic understanding is shown to be independent of any addition. However, as we somewhat noted, Aquinas demonstrates that 'being' can be extended in two ways; namely, the predicamental (Aristotelian) and the transcendental (Platonic). These imply analogical *additio* to *ens*. Concerning the transcendentals, we discover the Angelic Doctor's ground of metaphysical insights since one can arrive at such conclusions through thorough reflection. As our quest here is on the transcendentals, let us examine a bit more how *ens* is the *prima* of the transcendentals.

This principle expresses that which is immediately apprehended in the first instance of the intuition of being. Therefore, it provides and carries its own evidence 'beyond' any known or unknown proof. As Owens suggests, its expression is the direct formulation of the immediate apprehension of *ens*.[284] The contrast of 'not-being' that goes with its expression has no addition of content to it, since *ens* is known only under the notion of *ens* (being). In a way, it is a tool; it is also thing. We think the Angelic Doctor often groups it together with the apprehension of *ens* following its double faceted character. The above quoted excerpt seems a contradiction in reducing the principle of being to the secondary level; but it is not as some philosophers, following Aquinas' explication above, have proposed. Aquinas simply clarifies two things at a time. The one is the onto-transcendent *prima* that is expressed as the ontological principle of being and the other is the state of demonstration.

Accordingly, Fabro, following the Angelic Doctor, accentuates the priority of *ens* over any other transcendental notion. It is the innovative semantic and metaphysical core.[285] The dialectic of the transcendentals is in its function. For Aquinas maintains that the 'one', 'true', and 'good' according to their proper

283 *De Ver*, q. 1, a. 1: "Sed enti non possunt addi aliqua quasi extranea per modum quo differentia additur generi, vel accidens subiecto, quia quaelibet natura est essentialiter ens; unde probat etiam Philosophus in III metaphys., quod ens non potest esse genus, sed secundum hoc aliqua dicuntur addere super ens, in quantum exprimunt modum ipsius entis qui nomine entis non exprimitur."

284 See J. Owens, *An Elementary Christian Metaphysics*, 115.

285 See C. Fabro, "The Transcendentality of Ens-Esse and the Ground of Metaphysics," 413.



intentions are founded on the intention of *ens*.[286] Further, we have Aquinas' emphasis to the unsullied transcendence of *ens*, above all, knowledge and knowing acts in its multiple feature manifestations and forms.[287]

Thus, this principle is being in its most profound and utmost ontological state. For the principle of being, in this onto-transcendent state, transcends the finite principles and is the cause of being equated to the primal first principle of being. At this stage, it assumes a causal nature through and beyond any being in reality, which causes 'being' in all reality.

Moreover, according to Aquinas, the transcendental efficacy of *ens* is the stimulating ground for the entire intentional order.[288] At this point in *ens* is a focus on integral spiritual union in knowledge (*verum*) as well as action (*bonum*), whose task is the activation of the process (beginning with the implicit, leading to the explicit). Thus, *ens* invigorates the internal and the external elements by its extension and is resolved in itself.[289]

### B.4 *Relationship between the First Principles and Transcendentals*

Our fairly extensive consideration on *ens* and its properties confronts us with another dilemma. After our examination of the attributes of 'being', another problem that arises is that of the first principles as regards their relationship with the transcendentals. Are the first principles' notions exactly parallel to being? If they are concepts correspondent to *ens*, why are they considered diversely? If, on the other hand, the first principles are not other attributes of 'being' as in the transcendentals, what is their place in the metaphysical venture of Aquinas? Is there any relationship between the first principles and the transcendentals? Are there points of overlap in the two concepts or are they entirely mutually opposed notions? If there are, what kind of association exists between both notions in the Thomistic realistic philosophy? In this part of our inquiry, we wish to have a concise survey of some of these problems.

286 *In I Sent*, d. 19, q. 5, a. 1, ad 8: "Unum, verum et bonum, secundum proprias intentiones, fundantur supra intentionem entis, et ideo possunt habere oppositionem contrarietatis vel privationis fundatae super ens, sicut et ipsa super ens fundantur."

287 See *In I Sent*, d. 19, q. 5, a. 1, ad 7. Fabro qualifies this attribute of *ens* as the "'constitutive containment' of every knowing act..." See C. Fabro, "The Transcendentality of Ens-Esse and the Ground of Metaphysics," 413.

288 *De Ver*, q. 1, a. 1: "... quasi notissimum, et in quod conceptiones omnes resolvit, est ens, ..."; *In I Sent*, d. 8, q. 1, a. 3: "... sine quo nihil potest apprehendi ab intellectu."; *In IV Metaph*, lect. 6; "... nec aliquid hac operatione potest mente concipi, nisi intelligatur ens"; *ST*, I–II, q. 94, a. 2: "... est ens, cuius intellectus includitur in omnibus quaecumque quis apprehendit"; *ST*, I–II, q. 55, a. 4, ad 1: "... unde unicuique apprehenso a nobis attribuimus quod sit ens."

289 See C. Fabro, "The Transcendentality of Ens-Esse and the Ground of Metaphysics," 414.

Many philosophers have grappled with the notions of the transcendentals. Some have tried to discuss them together with the concepts of the first principles. A few others, like Mercier, have tried to contrast both notions and came up with meaningful conclusions. These attempts have contributed much in the knowledge of the first principles. However, we consider that the crux of the quandary, that is, the implication and the function of the first principles remains vague. Consequently, many scholars' attitude in the encounter with the first principles becomes that of circumvention. In this investigation, therefore, we will briefly ascertain the actual significance of the first principles that warrants their different classification.

To assist us in the examination herein, we shall articulate the salient elements in the quasi-definitions of the two notions. As we established above, the transcendentals are properties of 'being'. This implies, as Bittle proposes, that they are attributes, which are not direct parts of the essence of *ens* itself but which basically flow from the integral constituent of the essence. Fundamentally, they are entitatively positive but diverse from the very essence of 'being'.[290] They are, as such, certain supreme attributes of *ens* fundamentally associated with its notion and, in effect, with every being. However, they are not explicitly part of the content of the concept of 'being'. As we highlighted above, they are transcendentals because they transcend the level of every category or taxonomy of *ens*. On the other hand, the first principles exemplified in the PNC are the fundamental principles, which are immediately from the notion of being; they are insights essentially related to being. Generally, they do not admit of any demonstration because other demonstrations in reality come through them. For Aquinas, they are like bedrocks given to the intellect by God for all scientific knowledge.[291] Scholars, like Mercier, join the two concepts at this point.[292]

After his discourse on the transcendentals, Mercier introduces the first principles as notions that spring from the comparison of the transcendentals as certain relations between the latter. He defines the first principles as primordial relations, which occur from the juxtaposition of the transcendental concepts. He explicated further that, in order to be a first ontological principle, necessitates two requisites. The first is the need for each of the principle's terms to be a transcendental concept. Secondly, there must be an immediate relation between the two transcendentals.[293] He designates the first principles as immediate relations between two transcendentals. Thus, to be a first principle requires always the contrasting of two transcendental notions or ideas. The result is that there are as many first principles as there are ways of contrasting the transcendental notions or, put the

290 See C. N. Bittle, *The Domain of Being: Ontology* (Milwaukee (WI): Bruce Publishing Company, 1948), 131.
291 See *De Ver*, q. 2, a. 1 ad 5.
292 See D. J. Mercier, *A Manual of Modern Scholastic Philosophy*, 473–475.
293 See D. J. Mercier, *A Manual of Modern Scholastic Philosophy*, 473.



other way around, the number of first principles corresponds to the number of the transcendentals juxtaposed. Furthermore, he assumes that the subject of the principles could suppose either a universal or an abstract form. Hence, he came up with three principal notions or the first fundamental principles, namely, the principle of identity, the PNC, and the principle of excluded middle.[294] Scholars, like Twomey, have a similar line of thought on the development of his argument on the transcendentals and the first fundamental principles. We shall not delve into an elaborate representation of his claims, so as to avoid repetition, except in few instances we might consider crucial to our main focus in this study.

As we indicated in our considerations in the previous chapter, most of Aquinas' basic submissions on the first principles are retraceable to the Aristotelian conception. Aristotle's own concept of the first principles, as we accented in our first chapter, is that they are starting points (*archai*) without which there is no science as such. Over and above this assumption is the Thomistic affirmation about the first principles. According to Aquinas, as we established in our previous chapter, the principles are immediate concepts founded on being. Considering Mercier's definition of the first principles, it is fascinating but there is more to it. If we follow his foregoing proposal, we articulate a problem of an attempt to give away the first principles under the auspices of merely relational values and 'comparison'. His supposition abandons the key features in the Aristotelian-Thomistic realistic notions. Aquinas distinctly demonstrates the incontrovertible character of the first principles about their foundation. Aquinas submits further that they are founded immediately on the notion of being and that they are not fruits of comparison, as Mercier assumes. For instance, in one of the passages, Aquinas explicates: "For the act of 'understanding' implies the simple acceptation of something; whence we say that we understand first principles, which are known of themselves without any 'comparison'."[295] This Thomistic argument brings out the important aspects of Aquinas' former theses on first principles and conveys the actual nature of the first principles as irrefutable, as exemplified in the PNC. First principles are not simply relational concepts originating from the transcendental concepts; they are more importantly matrices of all judgments in reality. When we look further into Mercier's explication, we find that this inherent quality of *judicium* about the first principles is downgraded.

Subsequently, notions like 'first principles' are not, strictly speaking, transcendental notions of 'being' or built on their comparison but have a lot to do with the notion of being. As we mentioned in our previous chapters, their *resolutio* goes to the uncaused cause. Even in the dynamic finite reality, the first of such principles are mind enablers and foundations of knowledge. Aquinas does not group

294 See D. J. Mercier, *A Manual of Modern Scholastic Philosophy*, 474.
295 *ST*, I, q. 83, a. 4: "Nam intelligere importat simplicem acceptionem alicuius rei, unde intelligi dicuntur proprie principia, quae sine collatione per seipsa cognoscuntur."

them under the transcendentals, as such, but scholars, like Twomey, attempted to merge them.[296] However, to an extent, his insightful endeavour upholds the Thomistic doctrine of transcendentals. Twomey acknowledges that the largely accepted transcendentals imply being, however, under 'dissimilar aspects.' In the same thesis, he also affirms that the transcendentals are further insights into the notion of *ens* as interpretative of being.[297]

Again, first principles, as Aquinas generally emphasises,[298] are the basis of any science (intellectual knowledge), beginning with metaphysics. They ground our knowledge about reality itself. Although there are common grounds, Aquinas does not merge the two concepts related to 'being'. Both the transcendentals and the first principles have specificities in the reality of being. In line with the Thomistic vision already expressed, the first principles, as Bittle asserts, are rooted in the act of being.[299] They are necessary and incontestable; they flow naturally and spontaneously at all levels of being with minimal experience. Consequently, instead of the comparison suggested by Mercier, the first principles epitomised in the PNC, as Elders portrays, at any level formulate the nature of being, its attributes (properties), and its activity that always and necessarily appertain to every being. Thus, in the first principles, the predicates carry out one of these roles: first, the entire or partial expression of the essence of the subject (for instance, being is not non-being, being is one, and so on), and the expression of the property of subject (e.g. the whole is bigger than its part).[300] The first principles envelop the notion of the transcendentals and nurture them by regulating their implications.

The first principles are not empty ideas; they are vital regulatory laws of the mind. The principles, therefore, are an immediate spontaneous response in our contingent-necessary experience of beings. As Elders affirms, they comprise undeniable (forceful) universal insights that express the structure (configuration), laws, and attributes of being as evidenced in contingent *esse*, not as in the universal way in which the principles are articulated but in regard to the truth of their contents.[301] Considering these facts, Mercier's foregoing arguments on the conception of the first principles delimit their real nature and character.

We could also say that every transcendental notion can be developed in terms of the first principles, that is, in the form of necessary propositions, such as "nothing can be true and false at the same time;" "it is necessary to act according to the good;" "nobody loves evil as such," etc. In this sense, the list of the first principles

296 See J. E. Twomey, *The General Notion of the Transcendentals in the Metaphysics of Saint Thomas Aquinas*, 11–12.

297 See J. E. Twomey, *The General Notion of the Transcendentals in the Metaphysics of Saint Thomas Aquinas*, 9.

298 See *In I Metaph*, lect. 1; *In II APst*, lect. 20.

299 See C. N. Bittle, *The Domain of Being: Ontology*, 45.

300 See L. Elders, *The Metaphysics of Being of St. Thomas Aquinas*, 153.

301 See L. Elders, *The Metaphysics of Being of St. Thomas Aquinas*, 148.



can be quite extensive. First principles and transcendental notions are precisely correlative.

Therefore, the first Thomistic principles are not strictly speaking transcendentals but the former are implicit in the latter. We have seen that whenever the Angelic Doctor refers to them, he does so separately or brings them into the context of the notion of being. However, this does not suggest a sharp contrast, since whatever enhances 'being' is 'being' in a way. The 'act of being' through which the formal transcendentals are underscored has an import in the ontological first principles. As we noted earlier, the principles help the intellect to form notions and to judge; they are basically different from transcendentals, which are fundamentally positive aspects and properties of being. Conceived intuitively via minimal sensation by the human intellect, the first principles guide the mind to express other notions concurrent with being to which the transcendentals are part. The first principles are foundations in the intelligible reality, in the order of being, and in the order of knowledge. They are causative as principles. We cannot know 'being *qua* being' as such without the 'primal' principle of causality, which causes the knowledge in us, and this is the name that merits the principle. Thus, instead of definite distinctions between the notions (transcendentals and first principles), there is a remarkable complementarity. Hence, *ens* remains *primum cognitum*, as Aquinas emphasises, but the first principles are explicative of intelligible reality. First principles are acts as 'habits' of the intellect, as we shall soon ascertain.

## C. Conclusion

In this chapter, as our quest was to ascertain the knowledge of the first principles, we had a cursory consideration of the general notion of knowledge in order to get to our main focus. We began with the realistic idea of sensation and experience to discover how the inception of finite knowledge is via sensory knowledge. In the said discourse, we saw that even the Thomistic concept of intellectual intuition is based on sensation. Thus, in Thomistic understanding, there is no knowledge as such except through sensitive experience.

In our survey, we also saw that sensitive knowledge is not deprived of truth-value. At the same time, we came to the affirmation that sensible knowledge is intertwined with what is ordinarily expressed as intellectual knowledge, because it is naturally endowed with some intellectual ingredients.

Further, in an attempt to articulate the actual implication of the *nous* and *ratio* in the knowledge of the principles, we examined the Aristotelian-Thomistic signification of the *nous*, while contrasting it with the discursive entity, *ratio*.

Since the notion of *nous* is essential in the Thomistic analysis of the first intellectual concepts, as in *ens* and the first principles, we examined *nous* as judgment. In the same vein, we investigated Aquinas' proposals on the intellectual operations. This was meant to assist our understanding of the knowledge of being in act and, subsequently, the first principles. We also looked at the association between the *simplex apprehensio, compositio/divisio*. Consequently, we explored Aquinas' idea in the proposition about *simplex apprehensio*, and its import in the notion of *primum cognitum*. We underscored, therein, that *ens* is known through *simplex apprehensio* with implicit *judicium*, that reality is not distinctively knowable through only the 'essence'. We also affirmed that the Thomistic proposals about the three levels of intellectual knowledge are distinct, but they are correlated.

Moreover, we investigated intuitive abstraction through concepts and judgments, as it is crucial and basic in the notion of integral intellectual knowledge. We ascertained that the role of *compositio/divisio* is very important for realistic knowledge. Using some Thomistic hypotheses, backed up by some eminent scholars' interpretations, we established the arguments in favour of this level of understanding as the stage of comprehensive human knowledge. Besides, we delved into a fairly extensive discourse of the notion of *separatio* because of its central role in the intellectual operation.

Finally, we studied the Thomistic transcendental notions to help us appreciate better the notion of the first speculative principles according to Aquinas. In an attempt to understand and to ascertain the actual place of the first principles in relation to *ens*, we examined the implication of transcendental notions as necessary relations to *ens*. In the aforementioned study, we paid more attention to the notions of multitude, truth and good because of their import in the concept of the first principles. Ultimately, we underlined the fundamental character of *ens*. In the subsequent chapter, we hope to study the habit of first principles as a guide to a better understanding of our theme.

# Chapter 4
# Habits of the First Principles

In our previous chapter, we dwelt on different modalities of the detection and appreciation of the first intellectual concepts in Thomistic realistic philosophy. Our focus was on the diverse operations of the *nous* and its related functions from which spring any knowledge, as such, especially the first concepts of the mind, *primum cognitum* and the *principia prima*. For this reason, we had a quick glance at notions, like the transcendentals, and also considered *separatio* so as to apprehend the first judgment of reality. This was geared towards a metaphysical justification of every reality as the actuality of *ens*. Through it, we appreciated that the metaphysical foundation of all things is explicable by the principle of being and other ontological principles analogous to the attributes of *ens*. The aforementioned study incited a question about the 'how' in the entire hypothesis. Since this 'how' is articulated by the Thomistic *habitus principiorum*, it forms our subsequent central inquiry in this section.

Consequently, in this chapter, in order to understand the Thomistic notion and proposals on habit (*habitus*), we shall endeavour to examine the etymology of habits in a generic sense through the main types of habits. This attempt is to assist us in situating the habits of first Thomistic principles which is our main objective in this discourse. Thereon, we hope to investigate the principal ideas of Aquinas on the habits of the first principles, 'speculative habits' and 'synderesis', especially his hypotheses on *habitus principiorum primorum*. This will, hopefully, lead us to a crucial question on the 'innateness' of *habitus principiorum*.

Finally, for a better understanding, we shall study briefly the Thomistic 'innatist' notion as opposed to innatism. Through side-by-side consideration of Aquinas' views, together with some Thomists' opinions, we expect to arrive at a fairly objective analysis. We hope to discover through the said brief survey the interactive activity of *intellectus principiorum*, the illuminative action of *intellectus agens* and, finally, the perfective function of the operation of the intellect towards complete self-transcendence. Above all, we aspire to understand the wisdom embedded in *intellectus* wherein every realistic quest is found. We shall conclude the chapter on this note.

## A. An Overview of the Habits in the Realistic Context

### A.1 What are the Habits?

The Greek word *hexis*[1] with the Latin form *habitus*, which is translated as 'habit' in English, has a connotation of several interpretations, especially, in the contemporary society. This poses a problem to the use of the terminology in the technical sense. Even with the technical usage, there are diverse interpretations by different scholars from various schools of thought. However, as is apparent, our concern in this analysis in the philosophical ambit is the Aristotelian-Thomistic signification and use of the term *habitus*[2] as the perfection of the faculty. In this approach, *habitus* can be studied prominently under two perspectives: namely, the psychological and the moral. The psychological aspect, as Renard asserts, searches into the metaphysical causes of *habitus* and considers its intimate nature.[3] In other words, this is the speculative aspect, which constitutes our main concern in this inquiry. On the other hand, the moral viewpoint examines the relations of the good and bad habits (virtues and vices) according to nature and in view of the ultimate end.[4] Although considered from diverse perspectives, both of these, namely the speculative and the moral habits, are interconnected because they appertain to the same nature. Moreover, the concept of *habitus* presupposes a subject. Prior to any further survey on this theme and to enable us to narrow down our focus, let us first delineate its subject.

Who/what is then the proper subject of *habitus*? From the Aristotelian-Thomistic viewpoint, for the actual existence of habit, a subject in potency to various acts of determination is required.[5] There must, also, exist on this subject the possibility of the combination of varied principles for the formation of act. This implies that habits belong specifically to the human person. The reason is that human nature solely is characteristically endowed with the powers of indetermination necessary for the development of habits.[6] God, as the perfect being, is

1 See *Met*, V, 1022b 10.

2 See *In V Metaph*, lect. 20.

3 See H. Renard, "The Habits in the System of St. Thomas," in *Gregorianum* 29 (1948), 88–117, 88.

4 See H. Renard, "The Habits in the System of St. Thomas," 88. The moral habits cannot be independent as such from the data from the speculative search. This is because if the facts from the speculative inquiry were left out in the moral realm, then ethics would simply be relegated to mere solution of practical problems and only become casuistry. Consequently, it would fall short of the realistic philosophical science.

5 See *ST*, I–II, q. 51, a. 3.

6 See *ST*, I–II, q. 49, a. 4. The potency referred to here is the potency that can be both 'agent' and 'acted' upon. This is to say that only the operative potencies are capable of being agent



not potential to any act and has no need of habits. The animals, of either a lower or a higher category (tamed or untamed), possess only the kind of determination that allows them a natural sort of inclination (the instinct). In effect, they lack the indetermination specific for the upsurge of *habitus*. *Habitus*, therefore, has as its proper source the human soul, because that is the principle of various operations resulting from its endowment with potencies.[7] Moreover, as Renard submits, there is no habit in the senses because they lack permanence, except in the intellect, since *habitus* is a form that remains in the faculty.[8] Hence, with Glenn, we affirm that habits are ingrained in the soul, not as the soul's essence but in its operations and potencies.[9]

Nonetheless, some psychologists' contest the fundamental nature of habits as rooted in the intellectual powers. To some such scholars, habits are essentially bodily dispositions. Psychologists, like James, for instance, think that all habits are simply structural alterations in the body either of human persons or of animals, and he extends it even to inorganic bodies. Accordingly, he says that the most complex of all habits are simply 'concatenated' discharges in nervous centres.[10] To recapitulate his beliefs on habits, James further uses analogies from the science of physics to represent his claims on the purely bodily origin of habits.[11]

and acted upon, in such a way that they are not determined in one operation alone but are free to act. See also *De Virtutibus*, q. 1, a. 1.

7 See É. Gilson, *The Christian Philosophy of St. Thomas Aquinas*, 257; see also *ST*, I–II, q. 49, a. 4.

8 See H. Renard, "The Habits in the System of St. Thomas," 97. It is possible that the internal senses can acquire habits inasmuch as the senses act in line with rational judgment, but not when they simply result from the natural sensual instinct. The two sense appetites, the 'irascible' and 'concupiscible' appetites, for instance, are controllable by reason. And so, they can receive habits (passive elements), which are perfected in accordance with the faculties' (active elements) disposition to seek the reason's good. (See H. Renard, "The Habits in the System of St. Thomas," 101).

9 See P. J. Glenn, *A Tour of the Summa* (St. Louis: Herder Book Co., 1960), 137.

10 See W. James, *The Principles of Psychology*, vol. I (New York: H. Holt and Company, 1890), 108, According to William James, habits are all from the reflex paths of the nervous system. For he says: "The most complex habits, … are, from the same point of view, nothing but 'concatenated' discharges in the nerve-centres, due to the presence there of systems of reflex paths, so organized as to wake each other up successively–the impression produced by one muscular contraction serving as a stimulus to provoke the next, until a final impression inhibits the process and closes the chain. The only difficult mechanical problem is to explain the formation *de novo* of a simple reflex or path in a pre-existing nervous system. Here, as in so many other cases, it is only the *premier pas qui coûte*. For the entire nervous system is nothing but a system of paths between a sensory *terminus a quo* and a muscular, glandular, or other *terminus ad quem*." W. James, *The Principles of Psychology*, 108.

11 Accordingly James assumes: "So nothing is easier than to imagine how, when a current once has traversed a path, it should traverse it more readily still a second time. But what made it ever traverse it the first time? In answering this question we can only fall back on our general conception of a nervous system as a mass of matter whose parts, constantly kept in states of different tension, are as constantly tending to equalize their states. The equalization between any two points occurs through whatever path may at the moment be most pervious. But,

In our view, there are many loose ends in James' thesis on the source of habits. If the initial acquisition of habits were as mechanical as he presents it, life itself would be nothing but mathematical, and there might have been no need for this inquiry on the complex nature of the human constructs. In our opinion, habits are not just mechanical. We have Dufault's view to buttress our claim.[12] However, in order to avoid digression from our central investigation, we shall not delve into further analysis of his approach. Some other modern psychologists like Katz,[13] and Rokeach[14] prefer to use 'attitude' in place of habit. Nevertheless, we perceive a kind of substantial departure from the etymological import of the term *habitus* with this nuance. We will not examine the details of the implication herein since it is not part of our concern in this research. Our intention is simply to underscore that the theme *habitus* and its source are highly polemical even among experts like philosophical and developmental psychologists. Nonetheless, we champion herein the Aristotelian-Thomistic realistic model.

Given that the nature of this investigation is not particularly anthropological, we envisage that our analysis on the actual significance of habits will be concise. We hope only to accentuate what we consider as essential elements that expectedly will facilitate our main study.

### *A.1.1 Briefs on* Hexis, *the Aristotelian Perspective*

Traditionally, Aristotle describes habit as "a disposition according to which that which is disposed is either well or ill disposed, either in itself or with reference to something else."[15] Health, for example, is such a disposition. Aristotle clarifies this notion in another excerpt where he differentiates between what he implies by real state (that we properly designate as habit) and condition (which we can refer to as ordinary disposition).[16] From his enunciation, Aristotle demarcates knowledge

as a given point of the system may belong, actually or potentially, to many different paths, and, as the play of nutrition is subject to accidental changes, *blocks* may from time to time occur, and make currents shoot through unwonted lines. Such unwonted line would be a new-created path, which if traversed repeatedly, would become the beginning of a new reflex arc." W. James, *The Principles of Psychology*, 109.

12 See L. Dufault, "The Aristotelian-Thomistic Concept of Education," in *The New Scholasticism* 20 (1946), 239–257, 240.

13 See D. Katz, "The Functional Approach to the Study of Attitudes," in: *Readings in Attitude Theory and Measurement*, M. Fishbein, ed. (New York: Wiley, 1967), 459.

14 See M. Rokeach, *Beliefs, Attitudes and Values: a Theory of Organization and Change* (San Francisco: Jossey-Bass, 1968), 112.

15 *Met*, V, 1022b 10. See *Met*, V, 1022b 4–14 for further details on this definition.

16 See *Categories*, 8b 27–9a 12 esp. 9a 5–9. To demonstrate the permanent character of habit (state), Aristotle says that "states are also conditions but conditions are not necessarily states" [9a 10]. Accordingly, Aristotle portrays in the same passage that conditions (dispositions) are 'transitory'. This is because someone in a state is by that virtue, in some condition, but with condition, it is not always the case that the individual is also in a state.



as a kind of habit, because of its permanent nature except when distorted by some sort of radical change in the possessor. From Aristotle's distribution of the category of quality, we ascertain that habit and disposition are contained in the initial four divisions. In these categories, Aristotle defines 'habit' as a 'permanent' quality by which an entity is well or poorly disposed either in itself or in relation to something else.[17] From the Aristotelian perspective we also gather, among others, that habits grow with exercise.[18] In addition, Aristotle explicates in his *Ethics* the effects of habits: in relation to virtues and vices,[19] as a mean to excesses,[20] and as a permanent character ensuing from regular brutish behaviour.[21]

### *A.1.2 Aquinas' General View on* Habitus

Aquinas studies *habitus* from various perspectives, namely, its nature, its subject and its cause. For him, the controlling principle to distinguish one *habitus* from another is that each habit is exclusively proportioned to its very object and each is under its specific standpoint.[22] The proper appreciation of the Thomistic notion of *habitus*[23] necessitates the understanding that *habitus* is not parallel to a faculty as is apparent in the intellect. Thus, Aquinas affirms:

> Now habit differs from power in that power makes it possible for us to do a certain thing, whereas habit does not make it possible for us to do a thing, but confers a certain ability or inability for doing well or ill that which it is possible for us to do.[24]

The preceding demonstrates further that *habitus* and the faculties can be considered as principles and causes that are distinguished from particular acts. Taking this Thomistic excerpt as a lead to our brief investigation of habits, let us consider a few instances of various implications of habits. Prior to that, we note that *habitus* is one; and so, the distinctions of its modes are not mutually detached. They are interrelated since they appertain to one notion. Besides, our attempt to their

17 See *Categories*, 8b 27–9a 12; 11a 22.

18 See **Problems*, 928b 23–929a 5 esp. 928b 28–31. We put an asterisk against this work since it is attributed to Aristotle; its authenticity has not yet been proven.

19 See *EE*, 1220b 18.

20 See *EE*, 1222b 5–14.

21 See *EN*, 1148b 18–34.

22 See *ST*, I–II, q. 49, a. 2; see also R. Garrigou-Lagrange, *Reality: A Synthesis of Thomistic Thought* (St. Louis (MO); London: B. Herder Book, 1950), 285.

23 By *habitus* herein, except where otherwise stated or specified, we imply mainly the operational habits according to the Thomistic notion.

24 *SCG*, IV, Ch. 77, n. 4: "Habitus autem a potentia in hoc differt quod per potentiam sumus potentes aliquid facere: per habitum autem non reddimur potentes vel impotentes ad aliquid faciendum, sed habiles vel inhabiles ad id quod possumus bene vel male agendum.

grouping does not necessarily imply an ontological hierarchy. It is simply to facilitate our discourse. However, we shall accent such where needed.

### *a.* Habitus *as Quality*

Part of Aquinas' view on *habitus* in line with the Aristotelian general outlook is his consideration of habit as a quality. This notion of *habitus* constitutes one of its primary significations in Aquinas. The Angelic Doctor accentuates this attribute of *habitus* starting from its etymology. On this, Aquinas ruminates the fact that *habitus* comes from the word *habere*, which is to have; the meaning of *habitus* regarding this sense of having is to have a certain quality. Thus, Aquinas submits:

> But if 'to have' be taken according as a thing has a relation in regard to itself or to something else; in that case habit is a quality; since this mode of having is in respect of some quality. … And in this sense we speak of habit now. Wherefore we must say that habit is a quality.[25]

Aquinas further suggests that *habitus* is a certain mode of a substance, since that is its implication as a quality. For this reason, he affirms that *habitus* is the first species of quality because of its propinquity to nature.[26] Millán-Puelles, in line with Aquinas, corroborates that every habit, whether acquired or natural, which determines and perfects a power (every operative habit), is a 'quality' for which the power that is permanent is equipped with an inclination to be conducted in a certain form instead of another.[27] In addition, Pangallo expresses the same opinion by his confirmation that habit is intrinsic as a quality in the object in which it inheres.[28] Evidently, Pangallo also represents a similar view in his assertion that *habitus* is a quality, which is an 'absolute accident' designed to distinguish, determine, and qualify the being and acts of the object.[29] The reason is that the soul primarily exists as an entity and, then, follows the progressive necessary upsurge of the *habitus* in the soul's operations (as necessary accident).

We think that the Thomistic idea of habit as a 'quality' as found in the Aristotelian categories[30] gives this attribute an ontological right of place. Without the establishment of 'what' *habitus* is (the quiddity of habit), other attributes

25 *ST*, I–II, q. 49, a. 1: "Si autem sumatur habere prout res aliqua dicitur quodam modo se habere in seipsa vel ad aliud; cum iste modus se habendi sit secundum aliquam qualitatem, Et sic loquimur nunc de habitu. Unde dicendum est quod habitus est qualitas."

26 See *ST*, I–II, q. 49, a. 2.

27 See A. Millán-Puelles, *La formación de la personalidad humana* (Madrid: Rialp, 1963), 172. [Emphasis added].

28 See M. Pangallo, *"Habitus" e vita morale: fenomenologia e fondazione ontologica* (Napoli; Roma: LER, 1988), 33–34.

29 See M. Pangallo, *"Habitus" e vita morale: fenomenologia e fondazione ontologica*, 34.

30 See *Categories*, 8b 27–9a 12; 11a 22.



may not find a proper base. Subsequently, with Aquinas, we define *habitus* as "qualities or forms adhering to a power, and inclining that power to acts of a determinate species."[31]

### *b.* Habitus *as Disposition*

The foregoing gives way to another aspect of Aquinas' consideration of *habitus*. A common element in the Thomistic and Aristotelian analysis of the *habitus* is its articulation as a disposition. Accordingly, for Aquinas:

> Habit implies a disposition in relation to a thing's nature, and to its operation or end, by reason of which disposition a thing is well or ill disposed thereto.[32]

Moreover in another passage Aquinas submits: "Consequently habit neither gives nor removes the possibility of doing, but gives the facility of doing a certain thing well or ill."[33] As somewhat portrayed in the above excerpts, Aquinas' idea on habit as a disposition is in line with the Aristotelian view. Inasmuch as Aquinas utilises the word 'habit' for dispositions like beauty and health,[34] for proper distinction, we shall regard them more or less as 'habitual dispositions'. As we shall see shortly, such belong to the entitative habits.[35] Aquinas further illustrates that the 'disposition' can apply to diverse instances of this *habitus*. Therefore, citing Aristotle, he affirms that "habit is a disposition: and disposition is the order of that which has parts either as to place, or as to potentiality, or as to species."[36] To buttress this notion of the varied forms of this disposition, the Angelic Doctor confirms that:

> [But] habit as such does not belong to the order of objects of knowledge; nor are things known on account of the habit, as on account of an object known, but as on account of a disposition or form whereby the subject knows: and therefore the argument does not prove.[37]

31 *ST*, I–II, q. 54, a. 1: "Habitus autem sunt quaedam qualitates aut formae inhaerentes potentiae, quibus inclinatur potentia ad determinatos actus secundum speciem."

32 *ST*, I–II, q. 49, a. 4: "Habitus importat dispositionem quandam in ordine ad naturam rei, et ad operationem vel finem eius, secundum quam bene vel male aliquid ad hoc disponitur."

33 *SCG*, IV, Ch. 77, n. 4: "Per habitum igitur neque datur neque tollitur nobis aliquid posse: sed hoc per habitum acquirimus, ut bene vel male aliquid agamus."

34 See *ST*, I–II, q. 49, a. 1; *ST*, I–II, q. 49, a. 3; *ST*, I–II, q. 50, a. 1.

35 See *ST*, I–II, q. 49, a. 4: Here, we have to make a real distinction between habits as a permanent perfection of some nature or such, which merit the title, 'entitative habits' from the 'operative habits' (habits *per se*) directly connected with operation. Although the latter is the actual subject of our inquiry, to avoid clumsiness, we simply use 'habit'/'habits' or its Latin equivalent, '*habitus*'.

36 *ST*, I–II, q. 49, a. 4: "Habitus est dispositio, et dispositio est ordo habentis partes vel secundum locum, vel secundum potentiam, vel secundum speciem."

37 *ST*, I, q. 87, a. 2, ad 3.

Likewise, Aquinas, in another passage, substantiates that the apprehension of the good is not by the efficiency of a habit. Instead, habit is the cause by way of material disposition or any sort of disposition by reason of which the conjoined good becomes suitable or is apprehended as such.[38] The import (as we shall soon ascertain) is that habits in a strict sense are parts of the powers of the soul. Considering this fact in Aquinas, Pangallo corroborates that *habitus* is a stable disposition of an object judged in its receptivity or ontological constitution.[39]

For this reason, one could suggest that Aquinas progressively developed and improved on the Aristotelian hypotheses. Thus, the Angelic Doctor attributes the term *habitus* to the actual operative habits in the real philosophical sense. If they are mainly 'operative', the adjective is suggestive of another form of the *habitus*. We shall now examine the two aspects arising from this notion.

### c. Habitus *considered from Entitative and Operative Dimensions*

In his submissions on *habitus*, Aquinas articulates two major distinctions of the habitual modes: namely, the 'entitative' and the 'operative' habits.[40] Although Aquinas does not use the term 'entitative', we use it to streamline our analysis. In an attempt to distinguish a two-fold nuance of *habitus*, Aquinas situates it primarily in nature and, secondarily, as the operative feature. According to Aquinas *habitus* is first related to the nature of a subject and, on this basis, the subsequent, which is the operative, is justified. Hence, the Angelic Doctor succinctly explicates:

> For it is essential to habit to imply some relation to a thing's nature, in so far as it is suitable or unsuitable thereto. But a thing's nature, which is the end of generation, is further ordained to another end, which is either an operation, or the product of an operation, to which one attains by means of operation. Wherefore habit implies relation not only to the very nature of a thing, but also, consequently, to operation, inasmuch as this is the end of nature, or conducive to the end.[41]

The above Thomistic excerpt demonstrates that it is for the reason of their immediate subject, that habits are distinguished as entitative and operative habits. Following these distinctions, we find in the entitative habits the body as the subject.[42]

38 See *ST*, I–II, q. 43, a. 1.
39 See M. Pangallo, *"Habitus" e vita morale: fenomenologia e fondazione ontologica*, 33–34.
40 See *ST*, I–II, q. 49, a. 3.
41 *ST*, I–II, q. 49, a. 3.
42 See B. T. Sandin, "'Lo primario' en el hábito," in *L'agire morale, Tommaso d'Aquino nel suo settimo centenario. Atti del Congresso internazionale*, 5 (Napoli: Edizioni domenicane italiane, 1977), 540–549, 542.



Thus, on this notion of the entitative habits, one could place the 'habitual dispositions' as already highlighted, such as health, beauty, etc. On the supernatural level, which does not concern us in this inquiry, is situated the subject of habitual sanctifying grace. Yet, from the negative viewpoint, Aquinas speaks about original sin as part of our depraved nature.

On the other hand, the operative *habitus* that largely pertains to the soul, which forms the essential feature in our inquiry, has potencies as its immediate subjects. As Sandin assumes, habit has got to do with the 'nature' of its subjects either in the first (the body) or in the latter (the soul), and not with the potencies or acts.[43] In the same vein, Mier y Terán asserts that the notion of nature holds both for the entitative and the operative habits. The two are ordained towards the perfection of 'nature'.[44] Hence Aquinas affirms, "It is not the essence of habit to be related to power, but to be related to nature."[45]

Albeit, Aquinas does not employ the word 'entitative', we use it to designate *de facto* that even if habits are not essentially the form of the soul, they are fundamental in its operations as is apparent in our precedent demonstrations. Nonetheless, we come to terms with part of the exposition of Aquinas above, with Sánchez' opinion that the entitative habits are also operative ones, since their subject is not potency but nature itself. According to him, the entitative habits are intrinsically operative as the operation of the potency flows from nature's own operation. Therefore, he concludes that the operative habits are entitative also as every definition of habit is a quidditative quality (*in ordo ad naturam*).[46] From the preceding, we have ascertained that *habitus* is mostly operative. Does that imply mere operations? This will be the focus of our brief subsequent consideration.

### d. *The Natural Position of* Habitus *amid Faculty and Operations*

What is the actual position of *habitus* in the human consciousness and cognition? In most of his proposals on *habitus* Aquinas almost touches on the argument of whether *habitus* is a faculty or an act in itself. Through these, one could decipher how he appropriately situates *habitus* between the faculty and operations. In one of the most leading instances, Aquinas methodically suggests:

43 See B. T. Sandin, "'Lo primario' en el hábito," 542.
44 See R. Mier y Terán, "Prioridad del acto en la génesis de los hábitos operativos," in *Ensayos aristotélicos*, V. Aspe Armella; J. L. Rivera Noriega, eds. (México, (DF): Universidad Panamericana; Publicaciones Crúz O., 1996), 49–59, 52.
45 *ST*, I–II, q. 49, a. 3, ad 2.
46 See E. Sánchez de Alba, *La esencia del hábito según Tomás de Aquino y Aristóteles* (Pamplona: Servicio de Publicaciones de la Universidad de Navarra, 2000), 89.

> To have relation to an act may belong to habit, both in regard to the nature of habit, and in regard to the subject in which the habit is. In regard to the nature of habit, it belongs to every habit to have relation to an act. For it is essential to habit to imply some relation to a thing's nature, in so far as it is suitable or unsuitable thereto. But a thing's nature, which is the end of generation, is further ordained to another end, which is either an operation, or the product of an operation, to which one attains by means of operation. Wherefore habit implies relation not only to the very nature of a thing, but also, consequently, to operation, inasmuch as this is the end of nature, or conducive to the end.[47]

The preceding is a recap of the Thomistic understanding of the nature, and what we consider as the realistic character, of *habitus*. On close investigation, one observes that *habitus*, as subtle as it is, strictly speaking, belongs neither to the faculty nor to the operation. Even with its relation to both, it is of an independent category.

Consequently, Aquinas corroborates, "although an act does not always remain in itself, yet it always remains in its cause, which is power and habit."[48] This entails, as Aquinas affirms, that habits "imply primarily and principally relation to an act."[49] They are "midway between pure potentiality and perfect act."[50] This depicts that *habitus* in the Thomistic understanding is considered as a sort of medium,[51] which is an intermediary form (*forma media*) between perfect act and potency.[52] This idea in Aquinas is reflected in Renard's view that habit is a form and a partial or incomplete act.[53] Moreover, Aquinas substantiates that *habitus* "is related to a power of the soul as act to potency; since, of itself, the power is

47 *ST*, I–II, q. 49, a. 3: "Habere ordinem ad actum potest competere habitui et secundum rationem habitus; et secundum rationem subiecti in quo est habitus. Secundum quidem rationem habitus, convenit omni habitui aliquo modo habere ordinem ad actum. Est enim de ratione habitus ut importet habitudinem quandam in ordine ad naturam rei, secundum quod convenit vel non convenit. Sed natura rei, quae est finis generationis, ulterius etiam ordinatur ad alium finem, qui vel est operatio, vel aliquod operatum, ad quod quis pervenit per operationem. Unde habitus non solum importat ordinem ad ipsam naturam rei, sed etiam consequenter ad operationem, inquantum est finis naturae, vel perducens ad finem."

48 *ST*, I, q. 79, a. 13, ad 3: "... quod actus, etsi non semper maneat in se, semper tamen manet in sua causa, quae est potentia et habitus."

49 *ST*, I–II, q. 49, a. 3.

50 *ST*, I–II, q. 50, a. 4, ad 2.

51 See *ST*, I, q. 87, a. 2: "... habitus quodammodo est medium inter potentiam puram et purum actum." *SCG*, I, Ch. 92, n. 3: "Habitus imperfectus actus est, quasi medius inter potentiam et actum: unde et habentes habitum dormientibus comparantur."

52 See *De Ver*, q. 8, a. 14 ad 15: "... cum sint habitus, non sunt actus completi; sed formae quaedam mediae inter potentiam et actum."

53 See H. Renard, "The Habits in the System of St. Thomas," 94.



undetermined, and is determined to this or that by a habit."[54] This further implies that one *habitus* differs from another on the grounds of distinct acts and operations, but most essentially as a result of their varied subjects.

Subsequently, we establish that habit is not a pure potency but an intermediary between the unsullied power and the actualisation of the object; in other words, it shares in both potency and act.[55] For this reason, Aquinas affirms:

> Habit is an act, in so far as it is a quality: and in this respect it can be a principle of operation. It is, however, in a state of potentiality in respect to operation. Wherefore habit is called first act, and operation, second act.[56]

Furthermore, Aquinas supposes that habits are superadded determinations to the mind that launch specific relations between the soul and its operations. Accordingly, he affirms:

> But the form itself is further ordained to operation, which is either the end, or the means to the end ... But if the form be such that it can operate in diverse ways, as the soul; it needs to be disposed to its operations by means of habits.[57]

Let us now consider the involvement of *habitus* in its relation to human nature.

### e. Habitus *as Second Nature*

In his various analyses on *habitus*, among others, Aquinas further describes habit as a quality that is not the very substance itself but perfection. This implies, as it were, a second nature added to the substance, which transforms the latter.[58] In Aquinas, one of the principal notions about *habitus* is that it is a state of perfection wherein the faculties are rendered capable of operating perfectly.[59] In another instance, Aquinas relating *habitus* back to its nature demonstrates how it simultaneously perfects that which is the source. Thus, he asserts: "Even

54 *De Virtutibus*, q. 1 a. 3: "Nam habitus ad potentiam animae comparatur ut actus ad potentiam; cum potentia sit indeterminata quantum est de se, et per habitum determinetur ad hoc vel illud."

55 See H. Reith, *An Introduction to Philosophical Psychology*, 197.

56 *ST*, I–II, q. 49, a. 3, ad 1.

57 *ST*, I–II, q. 49, a. 4, ad 1: "Ipsa tamen forma ordinatur ulterius ad operationem, quae vel est finis, vel via in finem. ... Si autem sit talis forma quae possit diversimode operari, sicut est anima; oportet quod disponatur ad suas operationes per aliquos habitus."

58 See *ST*, I–II, q. 49, a. 2. For further details on the nature and second nature notions about *habitus*, see also B. R. Inagaki, "*Habitus* and *Natura* in Aquinas," in J. F. Wippel ed. *Studies in Medieval Philosophy* (Washington (DC): Catholic University of America Press, 1987), 159–175, 167 and 174.

59 See *ST*, I–II, q. 49, a. 4; See also L. Dufault, "The Aristotelian-Thomistic Concept of Education," 240.

as in acquired habits, the operation preceding the habit is productive of the habit; but the operation from an acquired habit is both perfect and enjoyable."[60] Thus, according to Aquinas, habits connote the perfection of the faculties.[61] Habits can be considered formally by their relation to the nature (the soul) in which they inhere. On this view, Inagaki suggests that Aquinas' opinion is that *habitus* is essentially related to the very nature of a thing *qua* its end[62] (in this instance, the mind's nature). If it is so, the nature of a thing has to do with its internal processes and this belongs to the inherent quality accentuated by Pangallo.[63]

Besides, habits can also be considered in relation to their operative modes and that, in turn, designates their formal objects.[64] Therefore, the *raison d'être* of habits is the facilitation of potency's attainment of its apposite objects.[65] This further implies, as Aquinas substantiates, that "in distinguishing powers, or also habits, we must consider the object not in its material but in its formal aspect (*ratio*), which may differ in species or even in genus."[66]

Taking this further, we can ascertain that habits have a special place in human nature, specifically the human mind and its functions. This is another means of emphasising that habits are really proportional to second nature, because of their perfective character and their positioning. This is apparent in Gilson's hypothesis that, as potencies are the bases for the actualisation of intellectual habits, their proper place is the possible intellect.[67] Given this reality about them, noetic habits enhance the potencies in the possible intellect. Moreover, we appreciate through Aquinas that the will forms an abode for habits. Accordingly he asserts, "... it is necessary that, in the will and in the other appetitive powers, there be certain qualities to incline them, and these are called habits."[68] The reason is that the will's boundless indetermination is founded on the *ratio*'s universality because it

60 *ST*, I, q. 62, a. 9, ad 1.
61 See *In V Metaph*, lect. 20.
62 See B. R. Inagaki, "*Habitus* and *Natura* in Aquinas," 168–169.
63 See M. Pangallo, *"Habitus" e vita morale: fenomenologia e fondazione ontologica*, 33–34.
64 As Garrigou-Lagrange suggests, from their operational modes, their formal object distinguishes habits. If the habits are of an infused nature, their object is a supernatural one (but that does not concern us herein); whereas the acquired habits have a naturally attainable reality as their object. See R. Garrigou-Lagrange, *Reality*, 285.
65 See *Q. D. De Anima*, a. 13 ad 5: "Habitus non sunt perfectiones potentiarum, propter quas sunt potentiae; sed sicut quibus aliqualiter se habent ad ea propter quae sunt, id est ad obiecta. Unde potentiae non distinguuntur penes habitus, sed penes obiecta; sicut nec artificialia, penes obiecta, sed penes fines."
66 *ST*, I–II, q. 54, a. 2, ad 1: "In distinctione potentiarum, vel etiam habituum, non est considerandum ipsum obiectum materialiter; sed ratio obiecti differens specie, vel etiam genere."
67 See É. Gilson, *The Christian Philosophy of St. Thomas Aquinas*, 257.
68 *ST*, I–II, q. 50, a. 5, ad 1.



is a faculty that stems from the rational soul.[69] For the same reason, it is equally perfected by the acts of the habits.

Additionally, the foregoing could be translated as a proposal that the Thomistic application of the term *habitus* has the function of perfecting and designating the intellectual soul's potencies,[70] which are of a universal character. This signifies that the boundless capability of the intellect having truth as its necessary end and the limitless capacity of the will, with the good as its positive end, provide the human person with the necessary possession of *habitus*.[71] Therefore, habit can adequately be interpreted as second nature of its entity with a perfective character. This notion, if we may suggest, is tied to its ontological being and attributes through its natural placement.

### *f.* Habitus *and Dynamism*

Another aspect we wish to briefly accentuate is the Thomistic view of dynamism as regards *habitus*. In most of his considerations on *habitus*, as is evident from the foregoing, Aquinas shows that *habitus* is a vital phenomenon. Since *habitus* inclines the intellect or the will towards particular acts (even in supposed acts of free-will), it is dynamic. On this point, in one of the passages, Aquinas illustrates *habitus* as a compelling force.[72] He also substantiates that as a result of this compelling drive, it is difficult to act against the dictates of such habits.[73] This argument further supports Gilson's proposal that habits establish a progressive and organisational dynamic element in the examination of the intellectual faculties. The Thomistic notion of *habitus* brings in a dual faceted notion of either progress or regress. This note of dynamism is an obvious pointer that life is a basic requisite of *habitus*.[74] Hence, Pangallo justifiably purports that habit both receives its existence and vitality from, determines, structures in some way, and qualifies the being and activity of the entity itself (in this case, the soul).[75]

69 See É. Gilson, *The Christian Philosophy of St. Thomas Aquinas*, 257. Although Aquinas acknowledges that there are habits in the powers of the soul that are subject to reason as in cognitive powers of sensation, he also demonstrates that they are extensions of habits as found in the intellectual soul. (For further details on this, see also H. Reith, *An Introduction to Philosophical Psychology*, 197).
70 See *De Virtutibus*, q. 1 a. 2: "Virtus perficit potentiam in comparatione ad actum perfectum; actus autem perfectus est finis potentiae vel operantis; unde virtus facit et potentiam bonam et operantem." See also H. Renard, "The Habits in the System of St. Thomas," 93.
71 See *De Virtutibus*, q.1, a. 6; See also H. Reith, *An Introduction to Philosophical Psychology*, 199.
72 See *De Malo*, q. 3, a. 13, ad 5: "Habitus autem facit motum voluntatis vehementiorem."
73 See *De Malo*, q. 3, a. 13, ad 6: "Sed difficile est operari contra id ad quod habitus inclinat."
74 See É. Gilson, *The Christian Philosophy of St. Thomas Aquinas*, 257.
75 See M. Pangallo, *"Habitus" e vita morale: fenomenologia e fondazione ontologica*, 33–34.

### *A.2. General Categorisation of Habits*

We begin by distinguishing between the good and bad habits in order to succinctly investigate the various kinds of habits. The good habits, otherwise known as 'virtues' are those habits that perfect the nature of their subject towards their proportionate nature and end. The good as depicted in a variety of species or kinds of virtues is due to the dimensions of the good present in them. Since the human person is a rational being, the good in him is rational. Aquinas further explicates that the good in man is twofold: one directly perfects the will, without which the person is incapable of freely developing and performing good acts, whose perfective principle is the correspondent perfective virtuous habit;[76] the other, appertains immediately to the intellect and orders the 'intelligible species' to a better grasp of necessary truths or the best means for the attainment of virtuous operation.[77] The bad habits, instead of perfecting their subjects, go against their nature; they can be equated to a kind of privation in the nature of the subject because they stifle growth in its nature.

With this distinction in mind, let us now examine other basic categories of habits in accordance with the Thomistic notion.

#### *A.2.1 The Intellectual and Moral Habits (Virtues)*

We start with a short inquiry into Aquinas' signification of the intellectual and moral virtues. According to the Angelic Doctor, "an intellectual virtue is a perfection of the intellect in knowing things. Now the intellect cannot, according to an intellectual virtue, speak false, but always speaks true: because to speak true is the good act of the intellect."[78] This fortifies our view that truth is the formal virtue of the intellect. About the moral virtues, Aquinas states: "The purpose of the moral virtues is that through them we may observe the mean in the passions within us, and in things outside us."[79] He also appends, "For it is evident that a habit of moral virtue makes a man ready to choose the mean in deeds and passions."[80]

76 See *De Virtutibus*, q. 1 a. 1.

77 See J. M. Christianson, "The Necessity and Some Characteristics of the Habit of First Indemonstrable (Speculative) Principles," in *The New Scholasticism* 62 (1988), 249–296, 265–266.

78 *SCG*, I, Ch. 61, n. 6: "Virtus intellectualis est quaedam perfectio intellectus in cognoscendo. Secundum autem virtutem intellectualem non contingit intellectum falsum dicere, sed semper verum: verum enim dicere est bonus actus intellectus, virtutis autem est actum bonum reddere." See also *ST*, I-II, q. 64, a. 3.

79 *SCG*, III, Ch. 34, n. 3; see also *ST*, I, q. 22, a. 1, ad 3.

80 *ST*, I-II, q. 53, a. 3.



Kvanvig portrays intellectual virtue in the narrow sense (that is, with the exclusion of intellectual excellences)[81] as simply a person's 'dispositions' to advance toward a specific target. He classifies the intellectual excellences as more than mere 'dispositions'; they belong to the 'powers' and 'abilities' of the person.

In line with the above, Aquinas portrays that the quiddity of *habitus* is knowable in two ways: through a general application of the principle of causality, by the recognition of the existing act in one's performance involving the will and the intellect; the second way consists of a self-introspective analysis juxtaposed with the law of causality.[82] Moreover, depending on how it is examined, and following the Aristotelian-Thomistic realistic philosophy, one discovers that there are various categorisations of *habitus*. One of the subdivisions is that habits can inhere in the nature of their proper subjects. The above-mentioned 'entitative' and 'operative' habits are appropriately situated within this category. Hence, Aquinas affirms not just the presence of the natural 'entitative' habits, but also of the 'operative' habits that are situated principally in the soul.

#### *A.2.2 A Glance at the Classification of the Intellectual and Moral Virtues*

Although there are several categories of habits as we already accentuated above, we shall curtail our view to the direct interest as it applies. Of the varied classifications, therefore, two types of habits fit the intelligence, which is our main subject of inquiry. They are of the 'theoretical' and 'practical' habits. The former refine reason in the cognitive order of acts that refer to 'verity' (truth). The latter, on the other hand, perfect reason in the cognitive order of acts, which are turned towards 'external operation'.[83] The theoretical (speculative) habits are acquired by knowledge, while the practical habits are acquired by action. In the Thomistic understanding, the theoretical habits are judicative or scientific. They are *intellect*, *science*, and *wisdom*,[84] whereas the habits of practical reason are *prudence* and *art*. Furthermore, in his discourse on habits, Aquinas adapts to the Aristotelian legacy demonstrated by Albert the Great in his assumption that every habit is either the perfection of the speculative or of the operative part of the soul.[85]

81 See J. L. Kvanvig, *The Intellectual Virtues and the Life of the Mind: on the Place of the Virtues in Epistemology* (Savage, Maryland: Rowman and Littlefield, 1992), 112.

82 See *In III Sent*, d. 23, q. 1, a. 2.

83 See J. F. Sellés, *Los hábitos intelectuales según Tomás de Aquino* (Pamplona: EUNSA, 2008), 69.

84 See *ST*, I–II, q. 50, a. 4: "Manifestum est enim quod vires sensitivae non sunt rationales per essentiam, sed solum per participationem, … Philosophus autem ponit intellectuales virtutes, quae sunt sapientia, scientia et intellectus, in eo quod est rationale per essentiam."

85 Albert the Great, *De Divinis Nominibus*, 417, 51: "Omnis habitus animae aut est partis speculativae aut operativae perfectio, quia non sunt plures partes in rationali anima." [From: *Albertus Magnus Santo, Alberti Magni Ordinis Fratrum Praedicatorum Super Dionysium De Divinibus Nominibus*, (Monasterii Westfalorum: Aschendorff, 1972)].

Furthermore, the consideration of the intellectual nature of the rational being in its relation to the knowledge of the truth offers us the insight that the acts of the intellect are not the same according to diverse objects. According to Aquinas, there are fundamentally diverse degrees of perfection in *habitus*. As the order of necessary truths appertains to the speculative intellect, it addresses and acquires the virtue of truth as found in *intellectus, scientia*, and *sapientia*. Hence, the Angelic Doctor confirms them as part of the speculative soul.[86] Let us now briefly discuss each:

- *Intellectus* is a sort of inborn and essential determination of the cognitive potency to its natural end, that is to say, *actus apprehensionis*,[87] through immediate evident principles regarding *ens universale*.[88] To this kind of habit appropriately belongs the active principle[89] in the cognitive potency that progressively assimilates to itself and actualises the passive-potential constituents of the intellective faculty. The perfection of the basic determination of the intellective power to its end is necessarily through the formation of elevated intellectual habits. For the necessary import of the *intellectus* in our research, we hope to examine it in more details in the next subsection.
- The habit of science (*scientia*), according to Aquinas, is a kind of second level of the perfection of the determination of the cognitive potency. It is caused in the intellect in accordance with its movement from the first propositions.[90] As the Angelic Doctor appositely affirms, there are many and varied forms of the habit of science (*habitus scientiarum*).[91] The diverse kinds of *habitus scientiae* are involved in the acquisition of specific knowledge in wide-ranging genres of being as regards secondary causes. Dufault reflects this notion in his hypothesis on Thomism regarding education.[92] Aquinas also shows that the "possible intellect itself is the subject of

86 See *In I Metaph*, lect. 1: "Et ut breviter dicatur, sapientia et scientia et intellectus sunt circa partem animae speculativam, quam ibi scientificum animae appellat."

87 See *De Malo*, q. 2, a. 3, ad 7: "Actus apprehensionis in nobis, qui scientiam a rebus accipimus, est secundum motum a rebus ad animam."

88 See *ST*, I, q. 5, a. 2; q. 78, a. 1; q. 79, a. 1.

89 See *ST*, I–II, q. 51, a. 2.

90 See *ST*, I–II, q. 51, a. 2.

91 See *In III Sent*, d. 14, q. 1, a. 3d: "Divisio autem habituum in diversis rebus cognoscendis contingit in nobis ex hoc quod formae intelligibiles in nobis sunt minime universales; unde oportet quod diversas res per diversas species cognoscamus; et diversae species secundum genus faciunt diversos habitus scientiarum." See also *SCG*, II, Ch. 60, n. 1: "Unde habitus scientiarum sunt in hoc intellectu passivo sicut in subiecto. Et hic intellectus passivus a principio adest puero, per quem sortitur speciem humanam, antequam actu intelligat." See also *ST*, I–II, q. 57, a. 2.

92 See L. Dufault, "The Aristotelian-Thomistic Concept of Education," 253.



the habit of science, by which the intellect, even though it be not actually considering, is able to consider."[93]

- Lastly wisdom (*sapientia*). With this virtue, Aquinas demonstrates that its object surpasses the objects of the other intellectual virtues because of its consideration of the Supreme Cause, that is, God.[94] *Sapientia* seeks the knowledge of every being in terms of its first ultimate cause.[95] Hence, as Inagaki explicates, the perfection of the fundamental and natural determination of the cognitive potency to its end is only through the acquisition of the habit of wisdom. The acquisition of this virtue enables the conformity of the cognitive potency with *ens universale*[96] to be actualised.[97] Consequently, the nature of the intellectual soul itself is made fully manifest by the causality of the acquisition of the virtue of wisdom. To portray, therefore, the unequalled character of *sapientia* among the intellectual virtues, Aquinas submits:

> [And since] it is by the cause that we judge of an effect, and by the higher cause that we judge of the lower effects; hence it is that wisdom exercises judgment over all the other intellectual virtues, directs them all, and is the architect of them all.[98]

Through Aquinas we appreciate further that, unlike the habits of sciences which have variant kinds, wisdom is just one as a result of its elevated nature and its object.[99]

- The practical intellect reaches out for contingent truths through prudence or *prudentia* (good sense)[100] and art. In this case, as Renard reflects, in Aquinas there is need for the distinction between true knowledge of what is to be done by the human person as a person, in other words of human acts (*recta ratio agibilium*) and the true knowledge of the things to be made, fabricated or

93 See *ST*, I–II, q. 51, a. 2: "Ipse ergo intellectus possibilis est in quo est habitus scientiae quo potest considerare etiam cum non considerat."

94 See *ST*, I–II, q. 66, a. 5: "Obiectum autem sapientiae praecellit inter obiecta omnium virtutum intellectualium, considerat enim causam altissimam, quae Deus est."

95 See *ST*, II–II, q. 45, a. 1.

96 See *De Ver*, q. 1, a. 1; q. 1, a. 9.

97 See B. R. Inagaki, "*Habitus* and *Natura* in Aquinas," 173.

98 *ST*, I–II, q. 66, a. 5: "Et quia per causam iudicatur de effectu, et per causam superiorem de causis inferioribus; inde est quod sapientia habet iudicium de omnibus aliis virtutibus intellectualibus; et eius est ordinare omnes; et ipsa est quasi architectonica respectu omnium."

99 See *ST*, I–II, q. 57, a. 2:"Ad id vero quod est ultimum in hoc vel in illo genere cognoscibilium, perficit intellectum scientia. Et ideo secundum diversa genera scibilium, sunt diversi habitus scientiarum, cum tamen sapientia non sit nisi una."

100 McCabe prefers to use the word 'good sense' in place of prudence as he considers it a more appropriate translation for the Latin word *prudentia*. For him, the word *prudentia* is mistranslated as prudence because *prudentia* is closer to practical wisdom than what we imply by prudence. See H. McCabe, "Aquinas on Good Sense," in *New Blackfriars* 67 (1987), 419–431, 419.

constructed (*recta ratio factibilium*).[101] The former, that is, *recta ratio agibilium*, carries the import of prudence, while the latter, *recta ratio factibilium*, introduces the practical virtue as in art.

- Prudence (*prudentia*) is a manner by which a human person knows and judges rightly his own free acts. The need for prudence arises from the fact, as Dufault appositely observes, of the blindness of two appetitive faculties, namely, sense-appetite and the will; they lack knowledge of their own, so the intellect, through general ethical principles judges them by way of prudence.[102] Based on this, Aquinas affirms:

> [But] the practical intellect is the subject of prudence. For since prudence is the right reason of things to be done, it is a condition thereof that man be rightly disposed in regard to the principles of this reason of things to be done, that is in regard to their ends, to which man is rightly disposed by the rectitude of the will ... so the subject of prudence is the practical intellect in its relation to the right will.[103]

In view of the above, we can propose with Dufault that prudence is a complex virtue, because of prudence' seeming partial belonging to the intellectual order as well as its concrete position in the moral order.[104] Prudence is highly valued to suitably conduct human behaviour. It guides human conduct to its proper end through the government of practical reason for right judgment. Consequently, as Aquinas confirms, "an intellectual virtue is needed in the reason, to perfect the reason, and make it suitably affected towards things ordained to the end; and this virtue is prudence."[105]

Prudence helps the practical mind to regulate inordinate passions and choose rightly what is to be done for the good of the human person in accordance with human nature and his/her end. In the same vein, Westberg suggests that prudence pertains to the good operation of the practical intellect, which is in charge of the

101 See *In III Sent*, d. 23, q. 1, a. 4a, ad 4: "Et dicitur actio, secundum quod sistit in operante, prout ejus operationes et passiones modificantur, quod contingit in operibus virtutum Moralium; et ideo prudentia, quae in eis dirigit, dicitur in 6 ethic., recta ratio agibilium; ars vero mechanica recta ratio factibilium." See also H. Renard, "The Habits in the System of St. Thomas," 113.

102 See L. Dufault, "The Aristotelian-Thomistic Concept of Education," 253.

103 *ST*, I–II, q. 56, a. 3: "Intellectus vero practicus est subiectum prudentiae. Cum enim prudentia sit recta ratio agibilium, requiritur ad prudentiam quod homo se bene habeat ad principia huius rationis agendorum, quae sunt fines; ad quos bene se habet homo per rectitudinem voluntatis, ... ita subiectum prudentiae est intellectus practicus in ordine ad voluntatem rectam."

104 See L. Dufault, "The Aristotelian-Thomistic Concept of Education," 253.

105 *ST*, I–II, q. 57, a. 5: "Et ideo necesse est in ratione esse aliquam virtutem intellectualem, per quam perficiatur ratio ad hoc quod convenienter se habeat ad ea quae sunt ad finem. Et haec virtus est prudentia."



cognitive constituent in the course of human action.[106] Although prudence does not set the goal (*finis*) in action, it is the means to achieve that goal.[107] Hence, its function is mainly in the stages of deliberation, decision, and execution. The virtue of prudence, which is markedly of the practical intellect, enables the mind to direct other moral virtues of the appetitive parts. As Renard cogently supposes, the virtue of prudence is comparable to a source of other moral virtues, not as in their efficient cause but as their regulator.[108] The implication is that, without the virtue of prudence, no virtue, such as justice, temperance, and fortitude may function well, since they often vary according to fluctuating conditions. In effect, in line with McInerny, we can assume that prudence concerns individual situations whereby a person acts; it can be considered as the application of general contingent truths to specific conditions.[109] This further explicates the enunciation of Westberg on prudence as the application of moral knowledge that depends on principles but is simultaneously geared towards action.[110] Consequently, we articulate with Aquinas the indispensability of prudence in practical life and say, "prudence is a virtue necessary to lead a good life."[111]

- The virtue of art (*ars*) is subdivided into 'liberal art' and 'mechanical art'.[112] It is another necessary virtue in the practical life. Unlike prudence, art is a virtue that perfects not the artist but the artwork of any form and of various kinds. The virtue in the artist is transferred to the piece of art wherein the finesse is demonstrated. Any additional beauty to enhance nature produced through man's ingenuity is due to his giftedness with the virtue of art. However, excellence always is seen in the things made. The human person needs this virtue to equip him/her in the civilisation of culture in diverse ways. Hence, the Angelic Doctor explicates:

> The good of an art is to be found, not in the craftsman, but in the product of the art, since art is right reason about things to be made: for since the making of a thing passes into external matter, it is a perfection not of the maker, but of the thing made, even as movement is the act of the thing moved: and art is concerned with the making of things.[113]

106 See D. Westberg, *Right Practical Reason: Aristotle, Action and Prudence in Aquinas* (Oxford: Clarendon Press, 1994), 191.

107 See *ST*, II–II, q. 47, a. 6: "Et ideo ad prudentiam non pertinet praestituere finem virtutibus moralibus, sed solum disponere de his quae sunt ad finem."

108 See H. Renard, "The Habits in the System of St. Thomas," 113–114.

109 See R. McInerny, *St. Thomas Aquinas*, 71.

110 See D. Westberg, *Right Practical Reason*, 190. We shall touch on the relation of prudence and the principles subsequently in our investigation on 'synderesis'.

111 *ST*, I–II, q. 57, a. 1; a. 5: "Unde prudentia est virtus necessaria ad bene vivendum."

112 See L. Dufault, "The Aristotelian-Thomistic Concept of Education," 242.

113 *ST*, I–II, q. 57, a. 1; a. 5 ad 1: "Bonum artis consideratur non in ipso artifice, sed magis in ipso artificiato, cum ars sit ratio recta factibilium, factio enim, in exteriorem materiam transiens,

Additionally, according to the Angelic Doctor, these intellectual and moral virtues are limited in enhancing and perfecting human nature, because they are part of the entire categories of habits and virtues. There is, also, in the Thomistic view a third group, which is beyond the scope of this inquiry, but in which the subject of habits or virtues is completed. This group could facilitate the fullness of understanding about the discourse on virtues. Such are the infused theological virtues of faith, hope, and charity that dispose the human person towards his ultimate goal.[114] Since this grouping falls short of our survey, we shall not enter further into its consideration. Ultimately, with a complete view of the habits and virtues, a more comprehensive insight into human nature is attainable. It is through the in-depth insight into the definitive end of the human being that human nature can be understood in the metaphysical realm. Only when a person's ultimate end is understood that some definitive avowals about human nature are possible and effective. The further implication, as Inagaki underscores, is that only the one who has realised the ultimate end is capable of such contemplation of man under the *ratio* of being, since he is the only person who is aware of his/her real identity totally.[115] In the absence of this clear discernment, only a partial and imperfect understanding of human nature through the analysis of the habits or virtues can be obtained herein because of our *in statu viae* condition.[116]

Conclusively, it is evident that in the Thomistic understanding, *habitus* can be considered as an axiological and teleological structure. It is a natural structural generator of good and bad in human nature. The part of the good underlines the virtues, both strictly intellectual and action-prone habits.

## B. Habits of the First Principles

The foregoing discourse on *habitus* launches us into the question about the existence of the habits of the first principles (speculative and practical). Are there actually the habits of the first principles? If there are, what is their nature and how do they operate? What is their specific function, since we have established that habits are of the human nature and operation? Does nature duplicate its functions? Fundamentally, if the habits we are investigating actually exist in Aristotelian-Thomistic realistic philosophy, then they constitute the nucleus of our entire inquiry in this research.

non est perfectio facientis, sed facti, sicut motus est actus mobilis; ars autem circa factibilia est." See also *In II Ethica*, lect. 4, n. 3; *In VII Ethica*, lect. 12, n.14.

114 See *ST*, I–II, q. 62, a. 1; a. 3.

115 See *ST*, I, q. 11, a. 1.

116 See B. R. Inagaki, "*Habitus* and *Natura* in Aquinas," 173–174.



To properly address the indicated questions, we shall have recourse to Aquinas and seek evidence for our issuing assertions. We saw in our previous two chapters that Aquinas justifiably identified the self-evident principles with regards to every human person, that is to say, *per se nota omnibus*.[117] These principles cannot be known by all, as such, if there is nothing inherent in the human person that prompts him/her to know them. Every normal reasonable person universally apprehends and utilises the fundamental judgmental principles as totally definite (metaphysical) or, at least, implicit truths. As Aquinas fittingly asserts, the intellect cannot be mistaken about self-evident truths.[118] This is explicable with the positing of a 'natural' disposition that enables the human cognition for such a grasp. Moreover, if the human intellect were not enabled by such basic judgmental principles at the inception of the mind's bestirring, there would have been no dependable foundation for further establishment of the intellectual knowledge or any cognition at all. This propensity is best explained by the recognition of a natural 'innate habit'. As Christianson appositely supposes, the mentioned intrinsic habit furnishes the human mind with the aptitude of certitude in knowledge about fundamental realities and for subsequent cognitions.[119] This habit is what Aquinas often refers to as habit of the first principles. With this précis in view, let us further explore Aquinas' hypotheses on this *habitus principiorum primorum*.

### *B.1 A Brief Survey on the Nature of* Habitus Primorum Principiorum

In many of his assumptions, Aquinas distinctly speaks of a specific and unique habit that he depicts as *habitus principiorum primorum*. According to him, this habit is present both in the speculative and in the practical aspects of the intellect.[120] The twofold presence of this species of habit in the human mind is so arranged in nature by God that the human person may not lack in any knowable reality. In effect, this *habitus* is distinct because it is 'naturally' implanted in the human intellect as Aquinas ingeniously accentuates.[121] For the speculative intellect, Aquinas nominates this habit as *intellectus principiorum*.[122] In the same vein,

117 On the *per se nota*, see especially the subtitle, *General Notion of the Use of the Principles* of our Chapter Two and the Introductory part of our Chapter Three.

118 See *ST*, I, q. 17, a. 3, ad 2.

119 See J. M. Christianson, "The Necessity and Some Characteristics of the Habit of First Indemonstrable (Speculative) Principles," 269.

120 See *De Ver*, q. 16, a. 1.

121 See *In I Sent*, prooem, q. 1, a. 3b, ad 3: "Habitus principiorum primorum non acquiritur per alias scientias, sed habetur a natura."

122 See *In I Sent*, prooem, q. 1, a. 5; etc.

he designates this original habit in the practical reason as synderesis.[123] These two facets of the habit of first principles are incorruptible, so to say, permanent in the human intellect. Hence, Aquinas corroborates: "Such are the habits of the first principles, both speculative and practical, which cannot be corrupted by any forgetfulness or deception whatever."[124] Furthermore, both of them are the inventive and true sources of any knowledge. Aquinas demonstrates that no one errs in the knowledge of the truth with the two features of habit of the first principles, i.e. the speculative and the practical.[125] God imprints both habits for the purpose of the knowledge of speculative truth and truth in the order of acts concerning right and wrong. In the case of the intellect, it is the innate seed for the fundamental knowledge of the verities, and from there stems all other scientific knowledge.[126] Synderesis is likened to a seed for the act of conscience wherein practical truth is realised.[127] The two *habitus primorum principiorum*, therefore, are mutually related in their causative nature of all the first principles and in the knowledge of the truth. To better appreciate their appropriate import in the philosophy of Aquinas, we shall briefly consider their peculiarities in regard to their functionality.

### *B.1.1* Intellectus Principiorum *and its Interactive Character*

In Aquinas the word *intellectus* has a plurality of meanings. This does not diminish its primary character as an immaterial faculty wherein are generated most operations in the human person. Instead, the multiple aspects of its operation strengthen its nature as an immaterial core of being. Its functionality in many modalities does not duplicate it as a faculty and the substantial form of the rational being. As highlighted earlier in our preceding two chapters, the intellect is a principle and an entity with diverse operations.[128] To check replication, we shall not go back into areas already discussed about the intellect. We shall only occupy ourselves here with the notion of the intellect as a habit of the first principles (*intellectus principiorum*).

In view of the foregoing, Aquinas often talks about the *intellectus principiorum* as the habit of the first indemonstrable principles. In one of the instances he affirms that "the first indemonstrable principles belong to the habit of the

123 See *ST*, I, q. 79, a. 12; *ST*, I–II, q. 94, a. 1 ad 2; *ST*, II–II, q. 47, a. 6 ad 1; and *De Ver*, q. 16, a. 1; see also *In II Sent*, d. 24, q. 2, a. 3, ad 1: "Synderesis dividitur contra alias potentias, non quasi diversa per substantiam potentiae sed per habitum quemdam; sicut si intellectus principiorum contra speculativam rationem divideretur."

124 *ST*, I–II, q. 53, a. 1: "Huiusmodi autem sunt habitus primorum principiorum, tam speculabilium quam practicorum, qui nulla oblivione vel deceptione corrumpi possunt."

125 See *In II Sent*, d. 39, q. 3, a. 1.

126 See *In I APst*, lect. 44, n. 3.

127 See *De Ver*, q. 17, a. 1, ad 6-second series (ss).

128 For details on the analysis and its functionality, see especially our considerations in Chapter Three under the subtitle, *Simplex Apprehensio: Intellectus (Nous) vs Ratio (Logos).*



intellect."[129] What does he imply by the habits of first indemonstrable principles? As we just mentioned above, the human mind is multifunctional. Concerning this argument, the intellect acts as an inherent disposition of the intelligence that conducts the mind to the retention of the terms of the first principles. Aquinas portrays it as the vision through which the mind is determined.[130] Some Thomists, considering this efficacious functionality of the human intellect, look at the mind as a mysterious entity. Elders for instance, appositely thinks it is an inexplicable phenomenon that the mind could gather the terms and hold them together in order to facilitate their implementation.[131]

On the other hand, Cottier suggests that as *habitus* perfects the faculty, there is an extension in the case of *intellectus*. In this circumstance, as the faculty and the habit are in view of the act which they specify, the term may know a new extension. Therefore, following the context, he assumes that the intellect will still designate the operation of the faculty, or that it is the concept elaborated by the operation, or that it can even be viewed as the very known object in this concept.[132] Justifiably, according to Cottier's idea, the intellect is the actual faculty being perfected by its very nature of this disposition (*intellectus principiorum*) as the operation. In other words, it produces the habits and, in turn, is elaborated by their operations, and the *intellectus* is the terminus of the known, which is the truth. From this arises part of the perfection of its subject by *sapientia* and another superadded aspect of the infused disposition, which is beyond the scope of this investigation. Thus, its functionality as *habitus* is a cyclic one that is not vicious but which is an optimal virtue[133] that perfects the intellectual mind through wisdom. We hope to revisit the argument on the survey of the influx of *sapientia*. However, it is enough to appreciate momentarily that *intellectus principiorum* goes back and forth to its very immaterial nature producing knowledge of different kinds because of the individual endowment identifiable in it.

Moreover, the intricate nature of intellect involves its subtle dynamism in operations. To have a profound and clearer perspective of this notion of *intellectus principiorum*, let us have an overview of the ontological maturity of the human *intellectus*. In the process of the knowledge of *ens*, the intellect understands alongside its attributes, that is, one, identity, truth, multitude, definiteness, good, and so forth. Within this context, the intellect develops the first fundamental principles

129 *ST*, I, q. 79, a. 9: "Principia prima indemonstrabilia pertinent ad habitum intellectus."

130 *ST*, I, q. 12, a. 13 ad 3: "Et sic, inquantum deest visio, deficit a ratione cognitionis quae est in scientia, nam scientia determinat intellectum ad unum per visionem et intellectum primorum principiorum."

131 See L. Elders, "The First Principles of Being in the Philosophy of St. Thomas Aquinas," 66.

132 See G. Cottier, "Intellectus et Ratio," in *Revue Thomiste* 88 (1988), 215–228, 217.

133 On the nature of the intellect's perfection by truth, the intellect's formal good, see also *ST*, I-II, q. 64, a. 3. Virtue here is in the formal sense of the knowledge of truth, the optimal excellence of the mind, which according to Aquinas' own avowal perfects the intellect.

that enable its expression of the notion of *ens*. As Bogliolo rightly thinks, in order to communicate these attributes, the intellect forms the first judgments, which are the original expressions of the full contents of the perception process of *ens*. All that could be assumed about the knowledge of first basic principles belongs *a fortiori* to the knowledge of *ens*.[134] For this reason, Bogliolo assumes that *intellectus entis* and *intellectus principiorum* mutually unite in one habit of knowledge to which Aquinas attributes more than *scientia*, that is, "*aliquid scientia altius*."[135] This is the moment justifiably identified by Aquinas as *intellectus principiorum*.[136] In line with Bogliolo, we corroborate that Thomistic sense of 'super-science' here is of the superlative kind. It is the *scientia* equated to that of the angelic knowledge, the "*altissimum nostrae scientiae*". Accordingly the Angelic Doctor affirms:

> Therefore, the relation of our intellect to those principles is similar to that which an angel has to all that he knows naturally. And since the knowledge we have of principles is the highest form of our knowledge, it is evident that on this summit of our nature we reach to some extent the lowest point of an angel's.[137]

The above reference of Aquinas to the habit of *intellectus* as the lowest form of the angelic way of knowing is not a detection of a defect in the human context but an elevation of the human mind. The reason is that human intellect through this habit is at the peak of the human capacity's propinquity to the angelic order. Hence, Aquinas writes:

> Divine wisdom "joins the ends of nobler things with the beginnings of lesser things." For natures which are ordained to one another are related to each other as contiguous bodies, the upper limit of the lower body being in contact with the lower limit of the higher one. Hence, at its highest point a lower nature attains to something which is proper to the higher nature and shares in it imperfectly.[138]

134 See L. Bogliolo, *Essere e conoscere*, Studi tomistici; 21 (Città del Vaticano: Libreria Editrice Vaticana, 1983), 36.

135 See *In I Ethica*, lect. 18, n. 17: "Laus est eorum quorum bonitas consideratur in ordine ad aliquid aliud. Sed optima non ordinantur ad aliquid aliud, quinimmo alia ordinantur in ipsa. Ergo optimorum non est laus, sed aliquid melius laude; sicut etiam in speculativis principiorum non est scientia, sed aliquid scientia altius, scilicet intellectus."

136 See L. Bogliolo, *Essere e conoscere*, 36.

137 *De Ver*, q. 8, a. 15: "Unde, sicut intellectus noster se habet ad ista principia, sic se habet Angelus ad omnia quae naturaliter cognoscit. Et cum cognitio principiorum in nobis sit altissimum nostrae scientiae, patet quod in supremo nostrae naturae attingimus quodammodo infimum naturae angelicae."

138 *De Ver*, q. 16, a. 1: "Divina sapientia coniungit fines primorum principiis secundorum; naturae enim ordinatae ad invicem sic se habent sicut corpora contiguata, quorum inferius in sui supremo tangit superius in sui infimo: unde et natura inferior attingit in sui supremo ad aliquid quod est proprium superioris naturae, imperfecte illud participans."



This is to say that our previous articulation about the intellect's resemblance of the angelic intellect in its instantaneous operation is identifiable through this habit.[139] The *intellectus principiorum* is a permanent and unconscious disposition of the mind to have fine and noble insights into the existent realities as in the knowledge and formulation of *ens et prima principia*. This further implies that this unique mode of the intellect is attributable more to the angelic cognitive process than to rational beings. Justifiably, we perceive with Bogliolo that this *scientia* is a primordial *super scientia*,[140] since according to the angelic Doctor it transcends normal human processes. As shown in the preceding Thomistic quotation, it is a sublime moment of knowledge of the human mind, a kind of participation in the angelic mode. Hence, according to Aquinas, through *intellectus principiorum* the human intelligence touches the angelic nature.[141]

Furthermore, the Thomistic notion of the *intellectus principiorum* as one that grasps the indemonstrable principles is seen in Aquinas' hypothesis in the sense that the intellect cannot be mistaken about any of its principles as in their terms and in their structures.[142] This implies that it is part of the permanent character of the intellect to know with precision and utilise the so-called self-evident intellectual laws. Hence, the Angelic Doctor affirms:

139 For further details on our survey on the intellect's immediate knowledge of fundamental realities, see especially our Chapter Three under the subheading, *Simplex Apprehensio: Intellectus (Nous) vs Ratio (Logos)*.

140 See L. Bogliolo, *Essere e conoscere*, 37.

141 See *De Ver*, q. 16, a. 1: "Unde et anima humana, quantum ad id quod in ipsa supremum est, aliquid attingit de eo quod proprium est angelicae naturae; scilicet ut aliquorum cognitionem habeat subito et sine inquisitione quamvis etiam quantum ad hoc inveniatur Angelo inferior, in quantum in his etiam veritatem cognoscere non potest nisi a sensu accipiendo. Unde et in natura humana, in quantum attingit angelicam, oportet esse cognitionem veritatis sine inquisitione et in speculativis et in practicis; et hanc quidem cognitionem oportet esse principium totius cognitionis sequentis, sive practicae sive speculativae, cum principia oporteat esse certiora et stabiliora. Unde et hanc cognitionem oportet homini naturaliter inesse, cum haec quidem cognitio sit quasi seminarium quoddam totius cognitionis sequentis; et in omnibus naturis sequentium operationum et effectuum quaedam naturalia semina praeexistant. Oportet etiam hanc cognitionem habitualem esse, ut in promptu existat ea uti cum fuerit necesse. Sicut igitur humanae animae est quidam habitus naturalis quo principia speculativarum scientiarum cognoscit, quem vocamus intellectum principiorum; ita etiam in ea est quidam habitus naturalis primorum principiorum operabilium, quae sunt universalia principia iuris naturalis; qui quidem habitus ad synderesim pertinet."

142 See *De Ver*, q. 1, a. 12: "Dicimur proprie intelligere cum apprehendimus quidditatem rerum, vel cum intelligimus illa quae statim nota sunt intellectui notis rerum quidditatibus, sicut sunt prima principia, quae cognoscimus dum terminos cognoscimus; unde et intellectus habitus principiorum dicitur."

> The intellect is always right as regards first principles; since it is not deceived about them for the same reason that it is not deceived about what a thing is. For self-known principles are such as are known as soon as the terms are understood, from the fact that the predicate is contained in the definition of the subject.[143]

The above Thomistic excerpt is a further proof of our earlier consideration about the immediate nature of the intellect.[144] Aptness is part of the being of the intellect, which is perfected in and through its own quiddity, the *intellectus principiorum*. About this, the note of immediacy again has been strongly depicted by the Angelic Doctor as the sterling quality of the *intellectus principiorum*.

Aquinas also affirms the essential import of the *habitus* of the first principles for any knowable reality. Aquinas portrays *intellectus principiorum* as in a natural movement towards its end that is the object of knowledge.[145] This is to say that the habit of the intellect is like a constant natural drive that moves the intellect towards its fullest self-realisation. In addition, the *habitus* of the intellect inclines the possessor to knowing that he possesses the 'habit' and the knowledge of other things. The implication is that one who possesses *intellectus principiorum* is certain of some crucial terms of any knowledge. This *intellectus* dissipates ignorance; it has an obvious quality. This premise reinforces Aquinas' assertion, previously represented, that *intellectus principiorum* is equated to a vision. Thus, Aquinas submits:

> Hence, anyone who knows, knows that he knows, since to know is to perceive the cause of a thing, that it is the cause of it, and that it cannot be otherwise. Similarly, one who has the habit of the understanding of principles knows that he has that habit.[146]

Finally, from most of the submissions of Aquinas herein represented and others not accentuated for limited space and time, we ascertain that the mind is the generator of the good (excellence in truth) both in the finite or infinite order. Aquinas identifies that through the infinite mind (God), the cause of the finite intellect, the

143 *ST*, I, q. 17, a. 3 ad 2: "Intellectus semper est rectus, secundum quod intellectus est principiorum, circa quae non decipitur, ex eadem causa qua non decipitur circa quod quid Est. Nam principia per se nota sunt illa quae statim, intellectis terminis, cognoscuntur, ex eo quod praedicatum ponitur in definitione subiecti."

144 For more details on this, see our discourse about the intellect's *statim* in Chapter 3 under the subheading; *Simplex Apprehensio: Intellectus (Nous) vs Ratio (Logos)*.

145 See *De Pot*, q. 2, a. 3: "Intellectus respectu cognitionis principiorum primorum, naturalem quemdam motum habet."

146 *De Ver*, q. 10, a. 10, ad 5: "Unde quilibet sciens scit se scire, cum scire sit causam rei cognoscere, et quoniam illius est causa, et quoniam impossibile est aliter se habere; et similiter aliquis habens habitum intellectus principiorum, scit se habitum illum habere."



human intellect is perfected by the continual quest for truth in the *intellectus principiorum*.[147] Nonetheless, since the focus of this research limits us to the finite reality, precisely, the human mind, we abandon the discourse on God and emphasise that the human intellect's true nature is brought out mainly through *intellectus principiorum*. As such, every human endeavour, either in the moral or intellectual sphere, is retraceable to the intellect as the principle and the *habitus*. The human intellect by its habit remodels itself in a way and reaches out to its ultimate good and in so doing discovers wisdom. This is because *intellectus* is like the architect of the whole structure of the principles and the source (*intellectus principiorum*) of the indemonstrable principles. In view of this general notion of *intellectus principiorum*, let us have a cursory glance at the modes of its operation.

### *B.1.2 The Object of* Intellectus Principiorum *and its Operational Modality*

As the pivotal fulcrum in the rational being, *intellectus principiorum* naturally assumes as its object *ens, et ea quae sunt per se entis inquantum huiusmodi.*[148] This involves the knowledge of *ens* together with its attributes *unum, verum, multitudo, prima principia*, etc.[149] Regarding the first principles, Aquinas gives precedence to the PNC as a model of the first indemonstrable principles. There are two aspects of this one principle, the principle of affirmation and the principle of negation. There is, as well, a pronounced intimacy within this habitual cognitive exercise of the intellect in the awareness of *ens* and these principles. We shall subsequently examine the basis of the import of PNC, because of its essential character in relation to *intellectus principiorum* and the entire reality.

On the other hand, when we talk about the modality of the operation of *intellectus principiorum*, we recognise Aquinas' significant explanations about this *super scientia* and its indemonstrability. He refers to *intellectus principiorum* as the highest *scientia* to show its sublime status. If this *scientia*, as we already accentuated above, is like a vision, an intuitive awareness, and knowledge underlined by immediateness from sensible data, it is then evident that it is an indemonstrable *scientia*. With the articulated characteristics, it is obvious that this *scientia* is beyond demonstration. Any attempt towards its demonstration would imply

147 See *De Ver*, q. 1, a. 4, ad 5: "Veritas secundum quam anima de omnibus iudicat, est veritas prima. Sicut enim a veritate intellectus divini effluunt in intellectum angelicum species rerum innatae, secundum quas omnia cognoscunt; ita a veritate intellectus divini procedit exemplariter in intellectum nostrum veritas primorum principiorum secundum quam de omnibus iudicamus."

148 See *SCG*, II, Ch. 83, n. 29.

149 See *Quodlibeta* VIII, q. 2. a. 2: "In intellectu insunt nobis etiam naturaliter quaedam conceptiones omnibus notae, ut entis, unius, boni, et huiusmodi, a quibus eodem modo procedit intellectus ad cognoscendum quidditatem uniuscuiusque rei, per quem procedit a principiis per se notis ad cognoscendas conclusiones; et hoc vel per ea quae quis sensu percipit, sicut cum per sensibiles proprietates alicuius rei concipio illius rei quidditatem."

delving into superfluity and redundancy. This trait of *intellectus principiorum* ordinarily illustrates that it is unreceptive of its own substantiation from demonstration since its authenticity communicates to any demonstration its certitude and verification. According to Aquinas, this is the sense of the indemonstrability of the *scientia* of the principles.[150]

Furthermore, as Bogliolo indicated, although it is paradoxical to postulate that *intellectus principiorum* is an indemonstrable principle and the ultimate finite cause of every demonstration,[151] nonetheless, it is an indispensable and inescapable fact. Ordinarily, it would have been impossible to arrive at any scientific conclusions if there were no indemonstrable *scientiae*. These are, so to say, the innate and indispensable indemonstrable principles at the summit of which is *intellectus principiorum*. If this fundamental reality is forgotten and undermined, in any field of the sciences, it will apparently and invariably lead to the state of some modern problematic situation. As we underscored in our first chapter, this is the reality with some modern philosophical inquiries like scepticism, relativism, idealism, and *a fortiori* other schools of thought in philosophy, whereby philosophy is relegated to an endless dialogue without conclusion. Unfortunately, it produces unresolved problems.

In addition to the foregoing, as we somewhat mentioned earlier, *intellectus principiorum* functions as the certitude and firmness of knowledge. As Aquinas confirms, *nullum aliud genus cognitionis quam intellectus, est certius scientia.*[152] This certitude is such that it fortifies and substantiates other and subsequent sources of knowledge. We apprehend further through Aquinas that the knowledge of the first principles in *intellectus principiorum* is a certifier.[153] It is also the habit

150 See *In I APst*, lect. 44, n. 3: "Intellectus nihil aliud sit quam quaedam scientia indemonstrabilis. Sicut enim scientia importat certitudinem cognitionis per demonstrationem acquisitam, ita intellectus importat certitudinem cognitionis absque demonstratione; non propter defectum demonstrationis, sed quia id de quo certitudo habetur, est indemonstrabile et per se notum. Et ideo ad hoc exponendum, subdit quod scientia demonstrativa nihil aliud est quam certa existimatio immediatae propositionis. Quod autem intellectus sit scientia indemonstrabilis patet ex hoc ipso quod dicit quod est principium scientiae." See also *In I APst*, lect. 7, n. 5–7: "Non omnis scientia est demonstrativa, idest per demonstrationem accepta; sed immediatorum principiorum est scientia indemonstrabilis, idest non per demonstrationem accepta. … Necesse est scire priora, ex quibus est demonstratio; sed haec aliquando contingit reducere in aliqua immediata: alias oporteret dicere quod inter duo extrema, scilicet subiectum et praedicatum essent infinita media in actu; immo plus, quod non esset aliqua duo accipere, inter quae non essent infinita media. Qualitercunque autem media assumantur, est accipere aliquid alteri immediatum. Immediata autem, cum sint priora, oportet esse indemonstrabilia."

151 See L. Bogliolo, *Essere e conoscere*, 49.

152 See *In II APst*, lect. 20, n. 15.

153 See also *In II APst*, lect. 20, n. 4: "Manifestum est enim quod illi qui habent cognitionem principiorum, habent certiorem cognitionem cognitione quae est per demonstrationem."



that perfects the intellect for the sublime knowledge of the truth.[154] The reason is that as *intellectus principiorum* gives rise to any knowledge in reality, in the same way, all certitude about knowledge is caused by the same principle.[155] Hence, Aquinas affirms that the certainty of knowledge is dependent on the certitude of the knowledge of the principles.[156] In other words, it causes certainty even in disciplines like mathematical knowledge.[157] The further implication according to Aquinas is that the presence of the *intellectus principiorum* is one that guarantees other universal principles.[158]

Aquinas designates this *intellectus principiorum* further as that which affords the intellect the spiritual experience of being. The reason is that it draws from matter and all the material properties as *ens*, so to speak, in a transcendent way. It draws matter, time, space, and sensitivity from its apprehension.[159] In fact, for man to have any knowledge in reality presupposes the beginning, which is the intellectual knowledge of *ens* made possible by *intellectus principiorum*. The foregoing in effect depicts *intellectus principiorum* as a principal manner of apprehension, which belongs to the same constitution of the faculty of the intellect. This *a fortiori* evidences the fact that it is a habit that is not acquired by an individual's personal efforts, or lost by negligence. Rather, as González appositely asserts, it is actualised in personal mode by each intellect.[160] Hence, with its fundamental and multiple modality of operation, *intellectus principiorum* demonstrates itself as a science of the sciences.

### *B.1.3 The Scientific Totality of* Intellectus Principiorum

*Intellectus principiorum*, as we accentuated above, is a principle of every science. Aquinas' dictum *altissimum nostrae scientiae* is a science of the principles. This

154 See *ST*, I-II, q. 57, a. 2: "Quod autem est per se notum, se habet ut principium; et percipitur statim ab intellectu. Et ideo habitus perficiens intellectum ad huiusmodi veri considerationem, vocatur intellectus, qui est habitus principiorum."

155 See *In II APst*, lect. 20, n. 5: "Nulla autem cognitio est certior cognitione huiusmodi principiorum."

156 See *In IV Metaph*, lect. 6: "Certitudo cognitionis ex certitudine principiorum dependet." See also *ST*, II–II, q. 4, a. 8, ad 3.

157 See *In I APst*, lect. 42, n. 8: "Illa enim per se intelliguntur; et talis eorum cognitio est certior omni scientia, quia ex tali intelligentia scientia certitudinem habet."

158 *ST*, I-II, q. 65, a. 1 ad 3: "Principia autem universalia, quorum est intellectus principiorum, non dependent a conclusionibus, de quibus sunt reliquae intellectuales virtutes."

159 See *In III Metaph*, lect. 9: "Nam intellectus immaterialiter cognoscit materialia: et similiter naturas rerum, quae singulariter in rebus existunt." See also *Quodlibeta* VIII, q. 2. a. 2: "In intellectu insunt nobis etiam naturaliter quaedam conceptiones omnibus notae, … per quem procedit a principiis per se notis ad cognoscendas conclusiones; et hoc vel per ea quae quis sensu percipit, sicut cum per sensibiles proprietates alicuius rei concipio illius rei quidditatem."

160 See O. J. González, "Tomas de Aquino: la aprehensión del acto de ser," in *Anuario filosófico* 22 (1989), 147–159, 156.

is the sublime and supreme moment of cognition in the human person. According to Bogliolo, it is a supreme moment in two senses, namely, the 'manner' and the 'content'. When we talk about the 'manner', although with the assistance of the sensible data, we refer to the immediate intuitional mode of *intellectus principiorum* in the knowledge of being and the first principles with its proximity to the angelic and divine knowledge. On the other hand, the 'content' refers to the inclusion of the entire reality in the intuition of *ens et prima principia*.[161] This enhances the nature of the scientific entirety of *intellectus principiorum*. In line with that, Aquinas also underscores its scientific nobility.[162] Besides, the two holistic aspects of this *scientia* demonstrate that *intellectus principiorum* is a *scientia par excellence* because it embraces the entire reality. It is through this totality of knowledge that the human person is revealed as 'omniscient' in some way. As Bogliolo aptly submits, the omniscience herein does not imply the divine knowledge. The human person is only analogously omniscient; this is to say that he possesses an imperfect omniscient ability; and so merits the name omniscience.[163] Since the human person is made open to knowing all things through this capacity (principle), he is potentially omniscient.

Furthermore, Aquinas indicates that *intellectus principiorum* is a *scientia* that pre-exists any and is assumed by every other *scientia*. This implies that any genuine scientific reflection presupposes the intuition of the first principles through which it is possible for the human person to advance in reasoning.[164] Moreover, it is impossible to separate the acquired sciences from this *scientia par excellence* of the first principles. Furthermore, no science exists unless it is founded on *intellectus principiorum*. Consequently, from Aquinas we appreciate that every science finds its necessary continuity through its association with this principle.[165] This is to say that the knowledge of *ens et prima principia* is

161 See L. Bogliolo, *Essere e conoscere*, 54.

162 See *ST*, I-II, q. 51, a. 2, ad 3: "Intellectus principiorum est nobilius principium quam scientia conclusionum." See also *ST*, I–II, q. 63, a. 2, ad 3: "Intellectus principiorum speculabilium est nobilior scientia conclusionum;"

163 See L. Bogliolo, *Essere e conoscere*, 55.

164 See *In II APst*, lect. 20, n. 5: "Immediata autem principia ideo ex praeexistenti cognitione addiscere non possumus, quia praeexistens cognitio est certior, cum sit causa certitudinis his quae per eam innotescunt."

165 See *In I APst*, lect. 1, n. 8–9: "Scientia fit in nobis actu per aliquam scientiam in nobis praeexistentem. Et hoc est fieri in nobis scientiam per syllogismum aut argumentum quodcumque. Nam ex uno in aliud argumentando procedimus. Ad ostendendum igitur necessitatem demonstrativi syllogismi, praemittit Aristoteles quod cognitio in nobis acquiritur ex aliqua cognitione praeexistenti. Duo igitur facit: primo, ostendit propositum; secundo, docet modum praecognitionis; ibi: dupliciter autem etc. Circa primum duo facit. Primo, inducit universalem propositionem propositum continentem, scilicet quod acceptio cognitionis in nobis fit ex aliqua praeexistenti cognitione. Et ideo dicit: omnis doctrina et omnis disciplina, non autem omnis cognitio, quia non omnis cognitio ex priori cognitione dependet: esset enim in infinitum



revealed as a body of knowledge virtually containing and inclusive of every other science. Hence, any progressive knowledge either collectively or as individual disciplines is pre-existent in the knowledge of *ens* and its principles demonstrated in *intellectus principiorum*. This also signifies an entirety of knowledge. Hence, as Bogliolo justifiably suggests, *intellectus principiorum* is an inexhaustible source and wellspring from which all the conclusions, proximate and non-proximate, discover their richness and origin.[166] Finally, *intellectus principiorum* as all-inclusive *scientia* has a pronounced impact on logic as we have also seen in gnoseology. We hope to touch on this argument subsequently in our general conclusions.

Since *intellectus principiorum* is a speculative *habitus*, there is another aspect of the *habitus principiorum* that deals with the practical life. To buttress our study on the all-inclusive character of this *scientia*, we shall also briefly consider shortly the other aspect, namely, the synderesis. Moreover, this paradigm *habitus*, as it were, is expressed fundamentally in the PNC. Therefore, before delving into synderesis, in order to have further insights into the features and functionality of the *intellectus principiorum*, we shall briefly analyse the PNC.

## *B.2 PNC an Expression of* Intellectus Principiorum

### *B.2.1 Structure of the PNC in Thomistic Perspective*

Our discourse on *intellectus principiorum* necessarily leads us into the investigation of the original formulation of the first intelligible principle, the PNC in realistic philosophy. As we saw earlier in Chapter Three, everything known is known as something that exists that is *ens*. For this reason, Aquinas substantiates that what is first acquired by the intellect is *ens*, and that in which we do not find the idea of being (*ratio entis*) is not from the intellect.[167] Accordingly, in this reality, all our intellectual knowledge is resolved.[168] Within this original plexus of *ens*,

abire. Omnis autem disciplinae acceptio ex praeexistenti cognitione fit. Nomen autem doctrinae et disciplinae ad cognitionis acquisitionem pertinet. Nam doctrina est actio eius, qui aliquid cognoscere facit; disciplina autem est receptio cognitionis ab alio. Non autem accipitur hic doctrina et disciplina secundum quod se habent ad acquisitionem scientiae tantum, sed ad acquisitionem cognitionis cuiuscumque. Quod patet, quia manifestat hanc propositionem etiam in disputativis et rhetoricis disputationibus, per quas non acquiritur scientia. Propter quod etiam non dicit ex praeexistenti scientia vel intellectu, sed universaliter cognitione. Addit autem intellectiva ad excludendum acceptionem cognitionis sensitivae vel imaginativae. Nam procedere ex uno in aliud rationis est solum."

166 See L. Bogliolo, *Essere e conoscere*, 56.

167 See *In Librum de Causis*, lect. 6: "Illud enim quod primo acquiritur ab intellectu est ens, et id in quo non invenitur ratio entis non est capabile ab intellectu."

168 See *De Ver*, q. 1, a. 1.

we discover the transcendental genesis of posterior knowledge. As *ens* is said to be in act according to the Angelic Doctor, he exemplifies the connectivity of *intellectus principiorum* with its expression through *ens* in the original fundamental principle, the PNC.

*a. Formulation of the PNC: Paradigm of Realistic Judgment*

The actuality of *ens* as Fabro aptly states does not only motivate existence but is also given with the principle of intelligibility. This signifies that *ens* is the transcendental network of validity for all the fundamental principles, starting with the PNC.[169] Accordingly Aquinas asserts:

> Now a certain order is to be found in those things that are apprehended universally. For that which, before aught else, falls under apprehension, is 'being', the notion of which is included in all things whatsoever a man apprehends. Wherefore the first indemonstrable principle is that "the same thing cannot be affirmed and denied at the same time," which is based on the notion of 'being' and 'not-being': and on this principle all others are based. … Now as 'being' is the first thing that falls under the apprehension simply, so 'good' is the first thing that falls under the apprehension of the practical reason, which is directed to action: since every agent acts for an end under the aspect of good. Consequently the first principle of practical reason is one founded on the notion of good, viz. that "good is that which all things seek after."[170]

The foregoing Thomistic excerpt is a recap of Aquinas' notion about the formulation of the two most basic principles in the theoretical and practical order respectively. The PNC as the first theoretical principle directly flows from the notion of being. Hence Aquinas establishes that the first indemonstrable principle is that being cannot be affirmed and negated simultaneously. On this principle, as Aristotle earlier propounded, all other principles are based.[171]

169 See C. Fabro, "Il nuovo problema dell'essere e la fondazione della metafisica," in *Rivista di filosofia neoscolastica* 66 (1974), 475–510, 499.

170 *ST*, I–II, q. 94, a. 2: "In his autem quae in apprehensione omnium cadunt, quidam ordo invenitur. Nam illud quod primo cadit in apprehensione, est ens, cuius intellectus includitur in omnibus quaecumque quis apprehendit. Et ideo primum principium indemonstrabile est quod non est simul affirmare et negare, quod fundatur supra rationem entis et non entis, et super hoc principio omnia alia fundantur, … Sicut autem ens est primum quod cadit in apprehensione simpliciter, ita bonum est primum quod cadit in apprehensione practicae rationis, quae ordinatur ad opus, omne enim agens agit propter finem, qui habet rationem boni. Et ideo primum principium in ratione practica est quod fundatur supra rationem boni, quae est, bonum est quod omnia appetunt."

171 See *Met*, IV, 1005 b 29.



To complete the structure as in the preceding citation, Aquinas adds the second aspect of the practical realm, that in the practical reason, the notion of the good is the first principle. Consequently, as Clavell rightly suggests, the Angelic Doctor shows that the first principle indicates an incompatible opposition between the positivity of the good and the negativity of the evil.[172] Moreover, the ingenuity of Aristotle in this formulation demonstrated in Aquinas presents and confronts us with the irrefutable facts of reality herein, that is the parallelism between being and not-being, and good and evil. In this simple formulation of the fundamental principle, PNC reality is interpreted in its entirety. In it we see that evil and good have no meeting point. It is similar to interpreting that 'A' is not simultaneously 'not-A'. In any situation in reality a thing is not simultaneously the opposite. This carries with it many other subsequent implications both in the fundamental scientific realm, the general sciences, and in the practical order.

With Aquinas' commentary on the Aristotelian metaphysics, he delves further into illustrating that the PNC is a principle of judgment, which rests on the fact that the first notion is *ens*. In view of this reality Aquinas explicates that it is actually through this principle that any further affirmation or negation in being can be made or is possible. Hence, he affirms:

> Since the intellect has two operations, one by which it knows quiddities, which is called the understanding of indivisibles, and another by which it combines and separates, there is something first in both operations. In the first operation the first thing that the intellect conceives is 'being', and in this operation nothing else can be conceived unless being is understood. And because this principle – it is impossible for a thing both to be and not be at the same time – depends on the understanding of being (just as the principle, every whole is greater than one of its parts, depends on the understanding of whole and part), then this principle is by nature also the first in the second operation of the intellect, i.e., in the act of combining and separating. And no one can understand anything by this intellectual operation unless this principle is understood. For just as a whole and its parts are understood only by understanding being, in a similar way the principle that every whole is greater than one of its parts is understood only if the firmest principle is understood.[173]

172 See L. Clavell, "Il primo principio della conoscenza intellettuale," in *L'uomo e il mondo nella luce dell'Aquinate VII*, Congresso tomistico internazionale 8: 1980: Roma Atti dell'VIII Congresso tomistico internazionale, (Città del Vaticano: Libreria Editrice Vaticana, 1982), 62–73, 63.

173 See *In IV Metaph*, lect. 6: "Cum duplex sit operatio intellectus: una, qua cognoscit quod quid est, quae vocatur indivisibilium intelligentia: alia, qua componit et dividit: in utroque est aliquod primum: in prima quidem operatione est aliquod primum, quod cadit in conceptione intellectus, scilicet hoc quod dico ens; nec aliquid hac operatione potest mente concipi, nisi

Since *ens* is shown through intellection in this principle as an implication of *ens* in judgment, which is the first unsullied intellectual judgment, thus, the paradigm of *intellectus principiorum* is that it is impossible 'to be' and 'not to be', namely, the PNC. There is then the first that falls into the mind, and with it, in actual *separatio*, a first in the intellective operation of judgment.

Following this dynamism, Thomists like Vansteenkiste expound that the first immediately known is the indeterminate, i.e. *ens* which unites in the first original judgment the fact of existence and the sense of belonging to something. This indeterminate being remains first in the sense of being the foundation (genesis) for successive knowledge. In this way, the first indeterminate 'being' is transcendental and can be applied to the unreal and the non-being (*esse*).[174] In order to draw out the PNC, Vansteenkiste further interprets the foregoing Thomistic notion as follows. According to him, the intellectual knowledge does not stop at the initial indeterminate, 'is', but progresses in different directions. One of the directions is the judgment that an *ens* is not the other. So the first judgment of combination of concepts assumes its form; that is being is not non-being. This is the primary judgment, absolutely speaking: it 'is' (*est*); and so, it is not a judgment of combination, but a synthetic judgment, whose elements are identified. As the first synthetic judgment is fundamental to all subsequent concepts, similarly the initial judgment is essential for all other subsequent judgments. This is a 'metaphysical principle', because it is immediately based on the known object, and an 'epistemological principle', because to know depends on the object.[175]

When examined objectively, either from Fabro's or from other Thomists' points of view such as Vansteenkiste's, the Thomistic notion of the PNC presents us with the basic modality of all normal human intelligence. This is because the underlying judgment for every human person is the judgment of that 'which is'

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intelligatur ens. Et quia hoc principium, impossibile est esse et non esse simul, dependet ex intellectu entis, sicut hoc principium, omne totum est maius sua parte, ex intellectu totius et partis: ideo hoc etiam principium est naturaliter primum in secunda operatione intellectus, scilicet componentis et dividentis. Nec aliquis potest secundum hanc operationem intellectus aliquid intelligere, nisi hoc principio intellecto. Sicut enim totum et partes non intelliguntur nisi intellecto ente, ita nec hoc principium omne totum est maius sua parte, nisi intellecto praedicto principio firmissimo."

174 See C. M. J. Vansteenkiste, "Il metodo di san Tommaso," in *Le ragioni del tomismo: dopo il centenario dell'enciclica "Aeterni Patris"* (Milano: Ares, 1979), 163. See also *ST*, I, q. 48, a. 2 ad 2: "Alio modo dicitur ens, quod significat veritatem propositionis, … cuius nota est hoc verbum est, … Et sic caecitatem dicimus esse in oculo, vel quamcumque aliam privationem. Et hoc modo etiam malum dicitur ens." See also *De ente et essentia*, c. 1: "Privationes et negationes entia dicuntur."

175 See C. M. J. Vansteenkiste, "Il metodo di san Tommaso," 164. See also *ST*, I, q. 11, a. 2 ad 4: "Primo cadit in intellectu ens; secundo, quod hoc ens non est illud ens, et sic secundo apprehendimus divisionem."



contrasted with that 'which is not'. In an attempt to represent the absolute nature of this principle, authors like Peillaube and Gardeil propose the qualification of the PNC with phrases such as "*ens non est non ens*."[176] Additionally, Peillaube describes it as the absolutely most certain principle.[177] Again, imbued with the strong conviction of the PNC, Aquinas substantiates that the possibility of the negation of this principle is only verbal. To negate the PNC, therefore, is absurd and unintelligible.[178] The PNC, as Aquinas concretises, defies acquisition by demonstration but it arises 'naturally' when the terms of the principle are known, which are that of *ens* and that of *non-ens*, with the minimal sensible experience that does not involve the innate notion.[179] Further, Aquinas categorically states that as the firmest of all principles the PNC comes effortlessly and 'unsought' to the one that possesses it. Hence he submits:

> The other two conditions are therefore evident, because, insofar as those making demonstrations reduce all their arguments to this principle as the ultimate one by referring them to it, evidently this principle is not based on an assumption. Indeed, insofar as it is by nature a starting point, it clearly comes 'unsought' to the one having it and is not acquired by his own efforts.[180]

Accordingly, the terms of the PNC are the original primary notions of the human intellect, *ens* and *non-ens*.[181] Subsequently, the metaphysical Thomistic formulations of this notion for instance are: "it is impossible for a thing both to be and not

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176 See É. Peillaube, *Initiation à la philosophie de Saint-Thomas* (Paris: M. Rivière, 1933), 54. See also H. D. Gardeil, *Introduction to the Philosophy of St. Thomas Aquinas: IV Metaphysics*, 110.

177 See É. Peillaube, *Initiation à la philosophie de Saint-Thomas* (Paris: M. Rivière, 1933), 54.

178 See *In IV Metaph*, lect. 6: "Quod autem praedicta huic principio conveniant, sic ostendit. Impossibile enim est quemcumque suscipere, sive opinari, quod idem sit simul et non sit: quamvis quidam arbitrentur Heraclitum hoc opinatum fuisse. Verum est autem, quod Heraclitus hoc dixit, non tamen hoc potuit opinari. Non enim necessarium est, quod quicquid aliquis dicit, haec mente suscipiat vel opinetur."

179 See *In IV Metaph*, lect. 6: "Tertia conditio est, ut non acquiratur per demonstrationem, vel alio simili modo; sed adveniat quasi per naturam habenti ipsum, quasi ut naturaliter cognoscatur, et non per acquisitionem. Ex ipso enim lumine naturali intellectus agentis prima principia fiunt cognita, nec acquiruntur per ratiocinationes, sed solum per hoc quod eorum termini innotescunt. … Manifestum est ergo quod certissimum principium sive firmissimum, tale debet esse, ut circa id non possit errari, et quod non sit suppositum et quod adveniat naturaliter."

180 *In IV Metaph*, lect. 6: "Et sic patent aliae duae conditiones; quia inquantum in hanc reducunt demonstrantes omnia, sicut in ultimum resolvendo, patet quod non habetur ex suppositione. Inquantum vero est naturaliter principium, sic patet quod advenit habenti, et non habetur per acquisitionem." [Emphasis added].

181 See *In XI Metaph*, lect. 5: "Quod quidem ea ratione primum est, quia termini eius sunt ens et non ens, qui primo in consideratione intellectus cadunt."

be at the same time,"[182] or "that the same thing cannot both be and not be at the same time"[183] or again "the same thing cannot both be and not be."[184] Obviously, these formulations are not substantially different. As we indicated in the first part of this research, the PNC, as an all-embracing principle or law, has its ontological articulation in the metaphysical formulations, but it also has other simpler formulations. Such can be found in logic and the general sciences, which also convey the same meaning but not as profound as the ontological formulations. Aquinas also gives emphasis to these other forms as is apparent in the statement that "the same thing cannot be affirmed and denied at the same time."[185]

### *b. Kant's Hypotheses and Formulation of the PNC*

Kant objects to the foregoing formulations especially with the word 'impossible'. Moreover, he contends the ontological basis of the PNC. We will not go into the details of Kant's *a priori* refutation because we dealt with this in our First Chapter.[186] We wish solely to underscore Kant's main objection to this principle. Although Kant accepts the PNC, his acceptance is utterly conditional. For Kant, the PNC is a general but negative condition for all truth and it is restricted only to logic. According to him, the PNC belongs to knowledge as knowledge and does not extend beyond that or to its objects. Thus, Kant submits:

> The proposition that no subject can have a predicate which contradicts it, is called the 'principle of contradiction'. It is a general though negative criterion of all truth, and belongs to logic only, because it applies to knowledge as knowledge only, without reference to its object, and simply declares that such contradiction would entirely destroy and annihilate it.[187]

In addition, Kant also considers it preposterous that the principle would be the determining reason for all verity about our knowledge. In his view, assistance from the PNC should not be conceded in the synthetic knowledge inquiry.[188] Again, Kant claims that the ontological formulation of the PNC is devoid of content and purely formal. This he also interprets as sheer inattentiveness. According to him, the apodictical certitude shown by the word 'impossible' is unnecessary and

182 *In IV Metaph*, lect. 6: "Impossibile est esse et non esse simul."
183 *In XI Metaph*, lect. 5: "Non contingit idem simul esse et non esse."
184 *In IV Metaph*, lect. 6: "Impossibile est esse et non esse."
185 *ST*, I–II, q. 94, a. 2: "Non est simul affirmare et negare."
186 For more details on Kant's *a priorism* with regard to the principles, see our discourse on *Idealism and Kant* in our First Chapter: C.3 *Idealism and Kant*.
187 I. Kant, *Critique of Pure Reason* (*CPR*), B 190, 26–30 [Cited from *Immanuel Kant's Critique of Pure Reason*, F. M. Müller, trans., (New York; London: MacMillan, 1922), 123].
188 See I. Kant, *CPR*, B 191, 14–19.



uncalled for because the PNC is understood by the structure of the proposition. Kant further criticises the concept of time through the addition of "at the same time."[189] Definitively he alters the wording of the PNC to suit his analytical motif as follows: "no subject can have a predicate which contradicts it."[190]

Kant's foregoing contention, especially with the ontological formula, touches the nature of this principle in its entirety. The PNC is the fundamental and original expression of *intellectus principiorum*. If this is removed, the intellect's knowledge of reality itself is jeopardised and questionable. This is because the mind will be devoid of the basic element of *separatio* that we articulated earlier in our previous chapter. Without this element, there would be no knowledge of *ens* as such. Besides, for the mind to express anything is to acknowledge the copula 'is' in all its ramifications and levels, namely, the ontological, gnoseological, and logical. Kant's logical recognition of the PNC refers only to the 'being thought' (*ens rationis*).

Moreover, the verity of logic that Kant focuses on is only the subsequent of the ontological 'is'. This implies that what he confirms in the logical aspect is pre-contained, as it were, in the ontological, since the truth of logic is substantiated by the metaphysical reality. The acceptance of this principle without the metaphysical part precludes the very truth that Kant assumes in the logical statements and propositions. As Aquinas demonstrated from our earlier representation, the PNC gives the intellect the basis of precision and confirmation about every being in reality. Reasonably, this principle enables the human mind to think because of its objective character. Without it the entire human 'thought process' principle crumbles.

Furthermore, Kant's observation about time apparently does not hold. This illustrates that he is unaware of the real implication of the expression 'at the

189 See I. Kant, *CPR*, B 191, 20–192, 10. [From F. M. Müller, trans, 124–125]: "There is, however, a formula of this famous principle– a principle merely formal and void of all contents– which contains a synthesis that has been mixed up with it from mere carelessness and without any real necessity. This formula is: It is impossible that anything should be and at the same time not be. Here, first of all, the apodictic certainty expressed by the word 'impossible' is added unnecessarily, because it is understood by itself from the nature of the proposition; secondly, the proposition is affected by the condition of time, and says as it were, something = A, which is something =B, cannot be at the same time not-B, but it can very well be both (B and not-B) in succession. … The principle of contradiction, however, as a purely logical principle, must not be limited in its application by time, and the before-mentioned formular runs therefore counter to its very nature. … If I want to say that a man who is unlearned is not learned, I must add the condition 'at the same time', for a man who is unlearned at one time may very well be learned at another. But if I say no unlearned man is learned, then the proposition is analytical because the characteristic (unlearnedness) forms part now of the concept of the subject, so that the negative proposition becomes evident directly from the principle of contradiction, and without the necessity of adding the condition, 'at the same time'."
190 I. Kant, *CPR*, B 190, 26.

same time'. As Jolivet fittingly suggests, this expression indicates simultaneity (concurrence), which is another way of saying together (simultaneously).[191] This is to say that under the same conditions, there is no restriction to the principle (the principle remains). However, its goal could be articulated as specifying that being and non-being are mutually exclusive as they are contradictories. We could also add that the inclusion of time means that we know the principle 'in' time, not *sub specie aeternitatis*, and that in this sense the principle has important consequences for time itself.[192] Kant's disputation about 'impossible' in the phrase is equally weak. The impossibility that goes with the principle is an indication that despite the fact that the word connotes negation, the PNC does not posit just one aspect (is not one-sided), that is, it is a balanced primitive natural upsurge of the human mind. Moreover, it demonstrates the incompatibility between the two that we mentioned above. Impossibility is opposed to necessity: the principle indicates a necessary universal truth.

Inasmuch as it also articulates the negative facet, the PNC is largely positive. This reinforces our prior survey on *separatio* and its significance in the operation of the intellect and subsequently of this principle. The PNC endows the mind with the original judgment with which to ascertain truth in all its capacities, the metaphysical, the gnoseological, and the logical. It is a *habitus* united to the nature of the intellect. The Angelic Doctor underlines this character of the PNC by the word 'naturally' and 'unsought' as we accentuated above.[193] As Inagaki submits about intellectual habits, the PNC is an essential offshoot of the intellectual nature.[194] When, therefore, extricated from the nature of the intellect, as Kant attempted, it becomes impossible for the human mind to operate because it would not know distinctions in reality. The principle in Kant is reduced to mere coherence: metaphysics is reduced to logic.

Appropriately, the PNC is the mind's actual source and fortification of knowledge of all kinds. Hence, as logic is simply concerned with the truth of

191 See R. Jolivet, *Trattato di filosofia: IV Metafisica* (II): *ontologia e teodicea* (Morcelliana, Brescia: 1960), 96.

192 See M. A. Castagnino–J. J. Sanguineti, *Tempo e universo: un approccio filosofico e scientifico* (Roma: A. Armando, 2000), 18–25, esp. 18–20.

193 See *In IV Metaph*, lect. 6. See also *SCG*, II, Ch. 83, n. 29: "Cum natura semper ordinetur ad unum, unius virtutis oportet esse naturaliter unum obiectum: sicut visus colorem, et auditus sonum. Intellectus igitur cum sit una vis, est eius unum naturale obiectum, cuius per se et naturaliter cognitionem habet. Hoc autem oportet esse id sub quo comprehenduntur omnia ab intellectu cognita: sicut sub colore comprehenduntur omnes colores, qui sunt per se visibiles. Quod non est aliud quam ens. Naturaliter igitur intellectus noster cognoscit ens, et ea quae sunt per se entis inquantum huiusmodi; in qua cognitione fundatur primorum principiorum notitia, ut non esse simul affirmare et negare, et alia huiusmodi. Haec igitur sola principia intellectus noster naturaliter cognoscit, conclusiones autem per ipsa: sicut per colorem cognoscit visus tam communia quam sensibilia per accidens."

194 See B. R. Inagaki, "*Habitus* and *Natura* in Aquinas," 171–173.



propositions, it has no realistic values as such. Kant's option and attempt with his unfounded 'analytical truth' apparently cuts through the fundamental integrity of reality. With his proposal, metaphysics itself loses its basis, as we saw about its connection with reality earlier in our investigation on *separatio*. This would also entail a lack of *suppositum*, as both are essentially linked. We interpret Kant's assumption as an attempt to dissociate the intellect from its true quality of grasping the truth, which is principally prelogical.[195]

### *B.2.2 Analytical Aspects of the PNC*

In our preceding discourse we acknowledged and underlined *ens* and *non-ens* as the two terms of the PNC. Earlier, in our previous chapter, we also identified through Aquinas that the second realistic notion is that of *non-ens*. In this investigation, we need to clarify our understanding about the two mutually opposed notions in the one principle. We shall also ascertain why some Thomists through Aquinas' submissions assign primacy to the PNC instead of others. One may ask, how is it that the second realistic notion is that of non-being and what is its content? We envisage that this and other such questions could enhance our understanding of the PNC, especially from the standpoint of its formulation.

#### *a. PNC and the Principle of Identity*

Apparently, there is an unresolved problem of ascendancy concerning the first principles amongst Thomists. On this question, some Thomists like Elders aptly distinguish that, while all admit the necessity of a first judgment, scholars like Manser and Gredt think that the PNC is that first judgment. Elders equally establishes that many modern Thomists, considering that the first principle must be affirmative, give precedence to the principle of identity. About other Thomists, Elders appositely perceives that they seem to live with a certain duality within the first judgment, or admit with Suárez two first judgments, of which the one is founded on negative demonstrations and the other on positive evidence.[196] The facts underlined by Elders, especially of duality, are pronounced in some of the views of Buratti.

According to Buratti, who assessed the PNC as one with the principle of identity (PI), the question of being and non-being is strictly connected to the

195 See C. Fabro, "Il nuovo problema dell'essere e la fondazione della metafisica," 503.

196 See L. Elders, "Le Premier Principe de la vie intellective," in *Revue Thomiste* 62 (1962), 571–586, 571. "Si tous admettent la nécessité d'un premier jugement, Manser, Gredt, d'autres encore sans doute, pensent que le principe de contradiction est ce premier jugement; au contraire, un bon nombre de thomistes modernes estimant que le premier principe doit être affirmatif, donnent la priorité au principe d'identité; d'autres enfin semblent s'accomoder d'une certaine dualité à l'intérieur du premier jugement, ou admettent avec Suárez, deux premiers jugements, dont l'un fonderait les demonstrations négatives, l'autre les preuves positives."

primordial notion of the PNC or identity. Buratti also thinks that for some scholars, it is not just the only law, but also the fundamental transcendental law. It (PNC or PI) is not the only principle, because the phenomenon of becoming and diversity excludes it. Nonetheless, it is the basic law since it expresses the first property of *ens*, which necessarily implies all proposed affirmative judgments. Hence, Buratti deduces that if the principle of identity were the only real law it might have ended in the solution advanced by Parmenides. Conversely, if the principle were not the founding law of being (*esse*), no other choice is left than to take note of its inconsistency (that is, its other part).[197] Nonetheless, although Buratti and some modern Thomists combine both principles (PNC and PI), we would like to leave them separate particularly because of the notion of negation properly articulated by the PNC. Besides, we think that if there were such things as a merging of the two notions Aquinas in his analysis of the PNC would have indicated that. But he simply identified the PNC as the first primeval principle in his submission that:

> Therefore, if someone were to think that two contradictories are true at the same time by thinking that the same thing both is and is not at the same time, he will have contrary opinions at the same time; and thus contraries will belong to the same thing at the same time. But this is impossible. It is impossible, then, for anyone to be mistaken in his own mind about these things and to think that the same thing both is and is not at the same time. And it is for this reason that all demonstrations reduce their propositions to this proposition as the ultimate opinion common to all; for this proposition is by nature the starting point and axiom of all axioms.[198]

Thus Aquinas appropriately illustrates that any demonstration whatsoever is reducible to the PNC. This is for the fact that insofar as the PNC is the ultimate principle that is necessarily referred to by all, evidently it is not based on any assumption. As Reith rightly posits, the PNC is so fundamental to human thought to the extent that no proposition can be meaningful or make sense without it. This implies also that any attempt to deny it is a denial that our knowledge of being is real.[199]

197 See M. L. Buratti, "I principi primi secondo San Tommaso," 236.

198 *In IV Metaph*, lect. 6: "Si igitur quis opinetur simul duo contradictoria esse vera, opinando simul idem esse et non esse, habebit simul contrarias opiniones: et ita contraria simul inerunt eidem, quod est impossibile. Non igitur contingit aliquem circa haec interius mentiri et quod opinetur simul idem esse et non esse. Et propter hoc omnes demonstrationes reducunt suas propositiones in hanc propositionem, sicut in ultimam opinionem omnibus communem: ipsa enim est naturaliter principium et dignitas omnium dignitatum."

199 See H. Reith, *The Metaphysics of St. Thomas Aquinas*, 39.



On the other hand, there are other significant contributions to the debate by the rumination of persons like Gardeil and González Álvarez. Gardeil, as well as González Álvarez, supposes that the notions of non-being and being are differentiated by a pure intellectual activity, the negation, and original absolute reaction of the spirit that is not defined by any other thing except by itself. Thus, the mind initially apprehends being; then it negates being, and in this way, conceives the notion or pseudo-notion of nonbeing.[200] However, Clavell, in line with Aquinas, seems to have actually grasped the totality of the signification of the division negated in this metaphysical notion. According to Clavell, the negation is not that of quantity (material division), which holds only for some realities, but division (negation) in a broader sense that 'exists' between 'this' and 'that', between *ens* and *non-ens*.[201]

In our view, the PNC is unequalled by any other in its direct reference to being because of the negation that immediately follows in its formulation. Aquinas, as Gardeil emphasised, did not articulate the PI in its own form, explicitly. It is an inference by some modern Thomists[202] drawn from the Thomistic literature. Nevertheless, the issue at stake is not about its invention but rather its formula. In its formulae, e.g. 'being is being', the PI expresses not a tautology but a necessary affirmation of identity between the subject and predicate. In effect, the PI like the PNC has a direct reference to being but its content, as Reith perceives, is a judgment that implies a plurality.[203] However, neither identity nor plurality, according to the Thomistic ontological investigation of being, is the immediate in the human intuitive knowledge process. Consequently, as Jolivet proposes, both PNC and PI under their diverse forms are connected by the concept of being[204] but are not an identical principle. Accordingly, we think that the PI in its form is posterior to the PNC.

### *b. Unity and Division*

To come to terms with the issues as the problem continues we shall also examine a few Thomistic texts on the first notions of the intellect. Formerly in our inquiry

200 See H. D. Gardeil, *Introduction to the Philosophy of St. Thomas Aquinas: IV Metaphysics*, 110. Gardeil submits: "As for the notion of non-being, the mind sees at once that its positive content is again the notion of being, from which it but differs by the negation it bears, solely an act of the mind. This response of the mind to the conception of being, the negation of it, is absolutely primary, a comportment so basic and instinctive to the mind that there is no way of defining it except through itself. The mind, accordingly, first apprehends (and conceives) being; then it denies (or conceives the negation of) being; and thus it has the notion or the pseudo-notion, of nonbeing." (H. D. Gardeil, *IV Metaphysics*, 110). See also A. González Álvarez, *Tratado de metafísica: ontología* (Madrid: Gredos, 1967), 127. [Emphasis on exists, mine].

201 See L. Clavell, "Il primo principio della conoscenza intellettuale," 66.

202 See H. D. Gardeil, *Introduction to the Philosophy of St. Thomas Aquinas: IV Metaphysics*, 113.

203 See H. Reith, *The Metaphysics of St. Thomas Aquinas*, 41.

204 See R. Jolivet, *Trattato di filosofia: IV Metafisica* (II), 95.

about *multitudo* we mentioned some of the premises concerning this argument.[205] Without going back to the former discourse, we shall refer to part of the ingredients here for illustration. For *ens* to clarify itself in the human intellect there is an initial necessary upsurge of the notion of unity, the negation of which is division, while plurality includes *unum* in its definition, since it is an aggregate of various units also divided within themselves. Aquinas explains that the nature of the metaphysical division involved and negated in the notion of unity is the non-material but existential division. This species of division is such that it demarcates 'this' from 'that', from *ens* and *non-ens*. It is one apparent in the first original ontological notions. Hence the Angelic Doctor expounds:

> The unity which is interchangeable with being implies the privation of formal division, which comes about through opposites, and whose primary root is the opposition between affirmation and negation. For those things are divided from each other which are of such a kind that one is not the other. Therefore being itself is understood first, and then non-being, and then division, and then the kind of unity which is the privation of division, and then plurality, whose concept includes the notion of division just as the concept of unity includes the notion of undividedness.[206]

Accordingly, the order of the intellectual apprehension of the first fundamental notions of reality is, first *ens*, then the *non-ens* (*negatio entis*), then follows division between the two, and the indivision of unity, that is to say, the negation that there exists within every single (individual) reality such contradictory opposition.

Moreover, Aquinas demonstrates the reason for the immediate upsurge of the notion of the negation of *ens*. Appropriately he asserts:

> But division comes to be understood from the very negation of being: so what first comes to mind is being; secondly, that this being is not that being, and thus we apprehend division as a consequence.[207]

205 On our brief survey on multitude, see Chapter Three of this research: *A Note on Multitudo as a Transcendental*.

206 *In IV Metaph*, lect. 3: "Unum quod cum ente convertitur importat privationem divisionis formalis quae fit per opposita, cuius prima radix est oppositio affirmationis et negationis. Nam illa dividuntur adinvicem, quae ita se habent, quod hoc non est illud. Primo igitur intelligitur ipsum ens, et ex consequenti non ens, et per consequens divisio, et per consequens unum quod visionem privat, et per consequens multitudo, in cuius ratione cadit divisio, sicut in ratione unius indivisio." See also *In I Sent*, d. 24, q. 1, a. 3, ad 2; *ST*, I, q. 11, a. 2, ad 4; *De Pot*, q. 9, a. 7 ad 15; *In X Metaph*, lect. 4.

207 *ST*, I, q. 11, a. 2, ad 4: "Sed divisio cadit in intellectu ex ipsa negatione entis. Ita quod primo cadit in intellectu ens; secundo, quod hoc ens non est illud ens, et sic secundo apprehendimus divisionem."



As Clavell aptly substantiates, the above excerpt from Aquinas apparently indicates that the negation of being and the subsequent division are linked in a fundamental reality, which is the existential distinction between the objects of human knowledge.[208] If the first immediate instance of our intellectual awareness gives us a confused knowledge of reality, the second brings an immediate distinction in our knowledge of this reality of 'that which is'. The foregoing Thomistic text is a synthetic explication of the entire reality of our fundamental intellectual knowledge endeavour. Justifiably, Clavell suggests that the basic human intellectual knowledge process could thus be analysed: a.) *ens*, b.) negation of *ens*, c.) division between *ens* and *non-ens*, and d.) division between this *ens* and that other *ens*.[209]

In the same vein, Aquinas represents earlier a more comprehensive text in line with the above breakdown in another passage. Accordingly he says:

> The first object of the intellect is being; the second is the negation of being. From these two there follows thirdly the understanding of distinction (since from the fact that we understand that this thing is and that it is not that thing we realize that these two are distinct): and it follows fourthly that the intellect apprehends the idea of unity, in that it understands that this thing is not divided in itself.[210]

Consequently, the Angelic Doctor presents the PNC as an integral notion of being immediately founded on the notion and apprehension of *ens*. How about the content of negation (*negatio entis*)? What is the real import of negation in the notion of PNC's reality? This constitutes a crucial dilemma among Thomistic experts that we wish to now consider briefly.

### c. Non-Ens *and Plurality*

The above-cited extract[211] underscores a *non-ens*, from which issues an unresolved controversy among Thomists. The implication of *non-ens* for some like González Álvarez is that of 'nothing'. Hence the PNC is identified as the assertion under the form of negative judgment of incompatibility and contradiction between *ens* and nothing (*nihil*).[212] Conversely, Elders interprets the Thomistic

208 See L. Clavell, "Il primo principio della conoscenza intellettuale," 66.

209 See L. Clavell, "Il primo principio della conoscenza intellettuale," 66–67.

210 *De Pot*, q. 9, a. 7 ad 15: "Primum enim quod in intellectum cadit, est ens; secundum vero est negatio entis; ex his autem duobus sequitur tertio intellectus divisionis (ex hoc enim quod aliquid intelligitur ens, et intelligitur non esse hoc ens, sequitur in intellectu quod sit divisum ab eo); quarto autem sequitur in intellectu ratio unius, prout scilicet intelligitur hoc ens non esse in se divisum."

211 See *De Pot*, q. 9, a. 7 ad 15.

212 See A. González Álvarez, *Tratado de metafísica: ontología*, 127; González Álvarez's own words are: "En el principio de contradicción así entendido entran en juego dos nociones

notion of *non-ens* not as *non-ens simpliciter* but as the *non-ens secundum quid*.[213] Therefore, he claims that the notion of *non-ens* as the second idea of the intellect is a concept of the 'Other'.

In view of the Thomistic stance and the reality of the true implication of *ens*, unlike Elders, it seems to us that the notion of *non-ens* in the PNC is the negation of whatever is the signification of *ens*. If we refer to the PNC as the absolutely first principle (not simply the first principle in a specific area) – or, in other words, if we conceive of the PNC as issuing from our very first understanding of *ens* – then, apparently, it is prior to any distinction, including the distinction between *simpliciter* and *secundum quid*. Consequently, we suppose that, in this instance, *ens* means neither *ens simpliciter* nor *ens secundum quid*; it is just *ens*. Likewise, *non-ens* means precisely neither *non-ens simpliciter* nor *non-ens secundum quid*. It just signifies *non-ens*. As such, we hold that *ens* is *ens* and prior to all. The distinction between *ens* and *non-ens* is the very first distinction. These are entirely 'simple notions', without the inclusion (in an explicit or determinate way) of any additional determination, such as, *simpliciter* or *secundum quid*. Hence, if in some sense they include further determinations, such could only be implicitly and indeterminately.

Elders further uses Plato to buttress his supposition. He relates that Plato's option for the 'Other' as his second indefinite principle is opposed to the 'One'. From the union of the two principles, he deduced the entire universe.[214] Subsequently, Elders citing Aquinas maintains that the 'Other' is like the *aliquid* (*aliud quid*) in scholastic philosophy. The 'Other' is intended here transcendentally as being *in quantum est ab aliis divisum*.[215] Definitively, he asserts that

positivas y dos actividades negativas del espíritu combinades de esta forma: posición del ente; negación del ente; nueva posición del ente como 'algo' que es no-nada, y la proclamación bajo la forma de juicio negativo de la incompatibilidad o contradicción entre el ente y la nada." (A. González Álvarez, *Ontología*, 127). Earlier he also suggests: "Una revelación del ente desde la nada no es posible. Pero, al mismo tiempo, observamos que el ente se nos revela haciéndose más patente y claro en su oposición a la nada. Pareciera que el ente adquiere perfil al destacarlo de la penumbra de la nada." *Ibid*, 124.

213 See L. Elders, "Le Premier Principe de la vie intellective," 579.

214 See L. Elders, "Le Premier Principe de la vie intellective," 579: "Pour Platon le concept de l'autre était l'un des plus généraux; il y a même des raisons de croire que Platon appelait parfois 'l'Autre' son deuxième principe indéfini, opposé à l'un. De l'union de ces deux principes, il déduisait l'univers entier."

215 See L. Elders, "Le Premier Principe de la vie intellective," 579. On Elders' reference see also *De Ver*, q.1, a.1: "Negatio autem consequens omne ens absolute, est indivisio; et hanc exprimit hoc nomen unum: nihil aliud enim est unum quam ens indivisum. Si autem modus entis accipiatur secundo modo, scilicet secundum ordinem unius ad alterum, hoc potest esse dupliciter. Uno modo secundum divisionem unius ab altero; et hoc exprimit hoc nomen aliquid: dicitur enim aliquid quasi aliud quid; unde sicut ens dicitur unum, in quantum est indivisum in se, ita dicitur aliquid, in quantum est ab aliis divisum."



the expression *non-ens* of the PNC could not be an *ens rationis* ('reason entity') or a pure negation.[216] It is apparent herein that Platonic reasoning, which conceives *non-ens* as a relative reality, inspires Elders' standpoint. This 'Other' of *ens* is such that when contrasted with another reality, it is partially a *non-ens*. However, for Aquinas, *non-ens* is a pure negation. Thus, it is obviously a 'reason entity' (*ens rationis*).[217]

Aware of this fact, Courtès affirms that the PNC is the very law of real 'physical being', which expresses the contingent *ratio entis*.[218] For the Angelic Doctor also submits that being is the first conception of the intellect, so that nothing can be opposed to 'being' by way of contrariety or privation, but only by way of negation. *Ens* is not founded on something, so neither is its opposite.[219] In addition, Courtès thinks that Aquinas introduces negation to the very principle of life of human intelligence as the means to comply with the truth of 'being' given to it.[220] In view of the foregoing, we observe that the interpretation of Elders still leaves us sceptical. As Clavell rightly articulates, Aquinas' illustration for the explication of division could have made one think of a *non-ens secundum quid*.[221] Besides, the Angelic Doctor in these expositions indicates contradiction and not just contrariety. The consideration of Aquinas, therefore, demonstrates that the 'one' (*unum*) is 'being' (*ens*) in which there is no distinction through being and non-being.[222]

216 See L. Elders, "Le Premier Principe de la vie intellective," 580–581. Elders' actual assumption reads: "Il nous reste à noter que le concept de non-être, élément du premier jugement, n'est pas un être de raison." (L. Elders, "Le Premier Principe de la vie intellective," 580). He subsequently submits "Pour résumer cette section, disons que la negation comme telle relève de la deuxième opération de l'esprit, et que le non-être, en tant qu'il signifie la disconvenance, est un être de raison. Puisque le *non-ens* du premier jugement précède le premier jugement, il ne peut signifier une pure négation." (L. Elders, "Le Premier Principe de la vie intellective," 581).

217 See *In V Phys*, lect. 2, n. 656.

218 See P. C. Courtès, "L'être et le non-être selon saint Thomas d'Aquin," in *Revue Thomiste* 66 (1966), 575–610, 608. According to Courtès: "Le principe de non-contradiction, qui fait intervenir l'être et le non-être, est la loi même de l'être réel physique, dont il exprime la contingente *ratio entis*." (P.C. Courtès, "L'être et le non-être selon saint Thomas d'Aquin," 608).

219 See *In I Sent*, d. 19, q. 5, a. 1, ad 8: "Ens est prima conceptio intellectus; unde enti non potest aliquid opponi per modum contrarietatis vel privationis, sed solum per modum negationis: quia sicut ipsum non fundatur in aliquo, ita nec oppositum suum: opposita enim sunt circa idem."

220 See P. C. Courtès, "L'être et le non-être selon saint Thomas d'Aquin," 588. "Ainsi est engagée la ratio entis immédiatement présente à notre intelligence. … La négation est introduite par saint Thomas au principe même de la vie de l'intelligence humaine comme le moyen de se conformer à la vérité de l'être qui lui est donnée." (P. C. Courtès, "L'être et le non-être selon saint Thomas d'Aquin," 588).

221 See L. Clavell, "Il primo principio della conoscenza intellettuale," 68. On the Thomistic texts see *De Pot*, q. 9, a. 7 ad 15: "Ex hoc enim quod aliquid intelligitur ens, et intelligitur non esse hoc ens, sequitur in intellectu quod sit divisum ab eo." See also *In IV Metaph*, lect. 3: "Illa dividuntur adinvicem, quae ita se habent, quod hoc non est illud."

222 See *In I Sent*, d. 24, q. 1, a. 3, ad 2: "Secundum quod intelligimus unum esse ens, in quo non est distinctio per ens et non ens."

It is rather "the division, which is caused by contradiction, inasmuch as two particular beings are said to be divided by reason of the fact that this being is not that being."[223] Thus this kind of unity is one that "implies the privation of formal division, which comes about through opposites, and whose primary root is the opposition between affirmation and negation."[224] Therefore, the Thomistic notion of contradiction is non-restrictive of 'being' (*ens*) and 'non-being' (*non-ens*) in their opposition, i.e. affirmation and negation.

The opposition of *ens* and *non-ens* as understood by Aquinas in the preceding texts and instances is real, as it were, out of our intellectual knowledge articulated from experience. As Sanguineti pinpoints, it is neither the fruit of an *a priori* deduction nor does it respond to an immediate experience, a sensible perception. Instead, it springs from a logical genetic analysis, which is realised solely from the implications of our conceptions. These, in turn, are obtained through sensible experience on the basis of the principle, according to which there is need to understand first that which is included in a posterior apprehension.[225] Viewed from this perspective, the notion of *non-ens* would not emerge as a simple original reaction of the intellect that negates *ens*. Rather, it should appear as a necessity established on the same limited and diverse reality and, ultimately, in our modality of grasping it as human beings. For this reason, Thomists, like Clavell, justifiably suggest that the apt limitation of *ens* by participation is the cause of the notion of negation or of *non-ens*.[226]

The abovementioned contradicts the position of the notion of nothing (*nihil*) already accentuated. This viewpoint propounded by scholars, like Zigliara and followed by Manser,[227] does not seem to properly represent Aquinas' intention in the PNC. Aquinas establishes different classes of distinctions of *non-ens*. We can articulate them in the Thomistic text, as follows: *quod nullo modo est* (i.e. the nothingness with reference to creation out of nothing (*ex nihilo*); the privation of *non-ens* in subject; and the prime matter which is non-being in act (*non est ens actu*). Accordingly, Aquinas submits:

> First, it is said of what does not exist in any way; and from this kind of non-being nothing is generated, because in reality nothing comes from nothing. Second, it is said of privation, which is considered in a subject; and while something is generated from this kind of non-being, the generation is accidental, i.e., inasmuch as something is generated from a subject to which some privation occurs. Third, it is said of matter itself, which, taken in itself, is not an actual being but a potential one.[228]

In line with the above mentioned, there are species of *non-ens* that could be linked to phenomena, like silence, emptiness, darkness, etc. However, they are of the restrictive typology and only in determined areas. On the contrary, the *non-ens* of the PNC has a universal character. As is perceptible in Aquinas, this kind is a simple negation. The Angelic Doctor affirms such as that which "expresses only the absence of something, namely, what it removes, without stating a determinate subject."[229] The notion of nothing (*nihil*) is undoubtedly *non-ens* in a more appropriate sense. On the other hand, the privation, matter and potency are simply that only in a broad sense. Nevertheless, as Clavell rightly asserts, *nihil* is apparently a more determined *non-ens simpliciter*, to the extent that it adds the sense of consciousness of 'nothing'.[230] In addition, Aquinas does not utilise *nihil* in the formulation of the PNC. He just uses the opposition between *ens* and *non-ens* for his explication of the PNC's terms.

Beyond these points, there is a more profound interpretation of the PNC seen in the Thomistic commentary on *De Trinitate* of Boethius. Through Aquinas' exposition on the text, we appreciate further that the PNC is fundamentally originative. The reason is that the notion of plurality is reducible to division as originating from the PNC, as in *ens* as opposed to *non-ens*. Thus, the notion of plurality is subsequent to the measure of the existence of division. Thus, Aquinas definitively sustains that:

> It is clear, then, that the primary reason or source of plurality or division stems from negation and affirmation. So we are to understand that plurality originates according to the following order. Being and non-being are

223 *In X Metaph*, lect. 4: "Est divisio quam causat contradictio, prout hoc ens et illud, dicuntur divisa, ex eo quod hoc non est illud."

224 See *In IV Metaph*, lect. 3: "Importat privationem divisionis formalis quae fit per opposita, cuius prima radix est oppositio affirmationis et negationis."

225 See J. J. Sanguineti, "La unidad y multiplicidad del universo," 155–156.

226 See L. Clavell, "Il primo principio della conoscenza intellettuale," 70.

227 See T. M. Zigliara, *Della luce intellettuale e dell'ontologismo secondo la dottrina de' santi Agostino Bonaventura e Tommaso di Aquino* (Roma: Tipografia Cattolica di F. Chiapperini e C., 1874), 188. See also G. M. Manser, *Das Wesen des Thomismus*, (Freiburg (CH): Paulusverlag, 1949), 273.



228 See *In XII Metaph*, lect. 2: "Dicitur enim non ens tripliciter. Uno modo quod nullo modo est; et ex tali non ente non fit generatio, quia ex nihilo nihil fit secundum naturam. Alio modo dicitur non ens ipsa privatio, quae consideratur in aliquo subiecto: et ex tali non ente fit quidem generatio, sed per accidens, inquantum scilicet generatio fit ex subiecto, cui accidit privatio. Tertio modo dicitur non ens ipsa materia, quae, quantum est de se, non est ens actu, sed ens potentia." See also *In V Phys*, lect. 2, n. 656.

229 See *In IV Metaph*, lect. 3: "Negatio dicit tantum absentiam alicuius, scilicet quod removet, sine hoc quod determinet subiectum."

230 See L. Clavell, "Il primo principio della conoscenza intellettuale," 71. For more reading on the interpretation of the notion of nihil in the PNC see C. Vansteenkiste, ed. *Rassegna di letteratura tomistica: Thomistic bulletin = boletín tomista = tomistische Literaturschau*, Vol. VIII (Napoli: Editrice Domenicana Italiana, 1976), 181. See also C. Giacon, *Verità, esistenza, causa* (Bologna: Zanichelli, 1973), 51–84.

> first conceived, and from them are established the primary divided beings, and hence their plurality. So, just as we immediately come upon unity after being, inasmuch as it is undivided, so we at once conceive the plurality of prior and simple items after the division of being and non-being.[231]

The foregoing is also a demonstration that unless the notion of the diversity in reality is related back to the original foundation, there will be cyclic infinite sources. Most of the differences are explicable by the already divided things in themselves. Aquinas brings in the notion of negation as the primary source of the understanding of division in reality. Hence, this point could be further explicated as *ens* is divided from *non-ens*, which is its negation, because from *ens* is separated that which is not *ens*. The reason for which one being is articulated as the negation of the other is that a specific *ens* is distinct from another. It follows then that the first fundamental principle contains an immediate negation in accordance with human apprehension, as if to say that in the one apprehension is included the negation of other.

Consequently, the first principle of reality and of plurality is found (formulated) in the opposition of *ens* and *non-ens*. From the PNC proceeds the formulation of the division (plurality) of the simple elements, as Aquinas suggests. Hence, through the simple elements, arises subsequent diversity or the otherness of the composed (things composed). Considering this fact Aquinas further enunciates:

> Now the notion of diversity is a consequence of this plurality, inasmuch as there remains in it the influence of its cause, which is the opposition of being and non-being. For one of several items is called diverse when compared with another because it is not that other. And because a secondary cause produces its effect only through the power of the primary cause, it follows that the plurality of primary items gives rise to division and plurality in secondary and composite ones only insofar as there remains within it the force of the primary opposition, which is between being and non-being, from which it has the nature of diversity.[232]

231 *In De Trin*, q. 4, a. 1: "Sic ergo patet quod prima pluralitatis vel divisionis ratio sive principium est ex negatione et affirmatione, ut talis ordo originis pluralitatis intelligatur, quod primo sint intelligenda ens et non ens, ex quibus ipsa prima divisa constituuntur, ac per hoc plura. Unde sicut post ens, in quantum est indivisum, statim invenitur unum, ita post divisionem entis et non entis statim invenitur pluralitas priorum simplicium."

232 *In De Trin*, q. 4, a. 1: "Hanc autem pluralitatem consequitur ratio diversitatis, secundum quod manet in ea suae causae virtus, scilicet oppositionis entis et non entis. Ideo enim unum plurium diversum dicitur alteri comparatum, quia non est illud. Et quia causa secunda non producit effectum nisi per virtutem causae primae, ideo pluralitas primorum non facit divisionem et pluralitatem in secundis compositis, nisi in quantum manet in ea vis oppositionis primae, quae est inter ens et non ens, ex qua habet rationem diversitatis."



From the Thomistic text just cited, we understand why the opposition of *ens* and *non-ens* extends its influence to every diversity and plurality. As such, the simpler elements are 'causative' of diversity in composed things in the measure to which the ontological force of the PNC is operative in them. Therefore, despite the ongoing controversies among Thomists on the preeminent principle, we confirm the PNC as the most fundamental. Considering the above analysis, its complementary character also substantiates our view.

### *B.2.3 An Appraisal of the PNC*

The foregoing analysis demonstrates the essential nature of the PNC as a principle and, most importantly, as an original habit that is 'quasi-innate' (as we shall see). From most of our considerations, the PNC is actually a second-to-none principle of reality for human knowledge at all levels starting from the metaphysical. Vansteenkiste proposes that it is good to start with the 'given' as the 'how' of knowledge.[233] We infer from it that the 'naturally' given is the content of the PNC as the indisputable principle of the human intellect. Vansteenkiste further explicates that it is necessary to conserve the fundamentals of contents, that is to say, being, first principles and their development.[234] Our 'conservation' of the PNC is in its emphasis and in highlighting its numerous implications and attributes for its better appreciation. Decisively, he rightly asserts that the method begins with the 'given' (received) and is developed with the ordering of concepts, judgments and reasoning on the contents of the 'given', that is, the what. This ordering is the amplification that leads to the actual synthesis.[235] This is actually our attempt through the articulation of the utmost human judgment so that others could fall into place. This implies that the method progresses by an embrace of the 'given' in and through the subsequent in order to realise its amplification in the 'what', the final synthesis.

Besides the insight into human finitude through this principle, the PNC is articulated mostly in metaphysics. Its light, as Clavell rightly suggests, exists in all knowledge.[236] Subsequently, it constitutes the insight (sagacity) of the human speculative endeavour through which metaphysics leads to the knowledge and structure of participation in varied causal entities and, eventually, to the ultimate principle, God.

Moreover, the PNC is a fundamental expression of the essence of reality. As a result of its existential import, reality, as Giacon suggests, appears with its essence of being non-contradictory. Our intelligence does nothing other than to grasp this essence in this principle of non-contradiction.[237] The human intellect

233 See C. M. J. Vansteenkiste, "Il metodo di san Tommaso," 166.
234 See C. M. J. Vansteenkiste, "Il metodo di san Tommaso," 166.
235 See C. M. J. Vansteenkiste, "Il metodo di san Tommaso," 166.
236 See L. Clavell, "Il primo principio della conoscenza intellettuale," 73.
237 See C. Giacon, *Verità, esistenza, causa*, 55.

perceives that the PNC of being is derived from this harmony (the essence) of reality; hence, it affirms that truth. In a simple but incisive manner, its formulation depicts that there is never a simultaneous positive and negative, a yes and a no. It is always one or the other. On an existential level, a neutral gender of being depicts an anomaly in cognitive beings. Qualifications in the practical life are an offshoot of the speculative: 'this' negates 'that'. Hence, the good, as the necessary end of human enterprise, is built on the principle of 'that which is', so to speak, 'the good' which negates the privation, 'that which is not', the bad (evil). Therefore, 'being', as we indicated through Aquinas above, cannot contradict itself. For anything to be in the proper sense is to realise its necessary and indispensable end, the good. Actually, beyond 'that which is good', there is practically nothing, as such. What is this good? To answer this question, the PNC, as a sagacious principle, invariably points towards another aspect, i.e. practical life.

Subsequently, the PNC as the fundamental expression of *intellectus principiorum* leads us to another vital consideration of the practical aspect of the *habitus principiorum*. These two principles operate hand in hand in the human mind. In effect, we cannot dispense of either of the two sides in order to arrive at holistic knowledge. Additionally, for a comprehensive appraisal of the import of the *habitus principiorum*, there is need for a crucial survey of the 'good'. Thus, our subsequent discourse will centre on 'synderesis'.

### B.3 *Synderesis the* Scintilla Rationis

Within his examination of the first principles, their connections, and their operations with habit of the first speculative principles, the PNC, Aquinas embarks on the survey of 'synderesis'. Although Saint Jerome introduced 'synderesis' into Latin literature, perhaps, etymologically, it is a variant of the Greek term, synesis (insight).[238] Often in Aquinas is the evidence that synderesis contains the first principles of natural law.[239] In view of this import, authors, like McInerny, suggest that synderesis is well-nigh interchangeable with natural law's compre-

238 Some scholars are of the opinion that the term 'synderesis' is a mistranslation and that the word may have an accidental origin. Our main interest is in Aquinas' interpretation and use of the word. We intend to have a cursory glance on the implication of synderesis as *habitus principiorum* in the philosophy of the intellect in Aquinas. On more reading about the term and its history, see J. F. Sellés, *Los hábitos intelectuales según Tomás de Aquino*, 417–424. Precisely about the mistranslation, see also D. Westberg, *Right Practical Reason*, 100.

239 See *In II Sent*, d. 24, q. 2, a. 3; *In II Sent*, d. 24, q. 2, a. 3, ad 4; *In II Sent*, d. 24, q. 2, a. 4; *In II Sent*, d. 39, q. 3, a. 1; *In III Sent*, d. 33, q. 2, a. 4D; *De Ver*, q. 16, a. 1; *De Ver*, q. 16, a. 2; *De Ver*, q. 16, a. 3; *De Ver*, q. 17, a. 1; *De Ver*, q. 17, a. 1, ad 6; *De Ver*, q. 17, a. 2; *De Malo*, q. 3, a. 12, ad 13; *De Malo*, q. 16, a. 6, ad 6; *ST*, I, q. 79, a. 12; *ST*, I, q. 79, a. 13; *ST*, I, q. 79, a. 13, ad 3; *ST*, I, q. 94, a. 1, ad 2; *ST*, II–II, q. 47, a. 6, ad 1, etc.



hension.[240] This interpretation introduces a sort of puzzlement about the actual implication of synderesis. With this hypothesis, one could easily confuse synderesis with realities, like conscience and prudence. Hence, prior to our proper investigation on synderesis, we have to clarify the possible doubts from the mind of our prospective readers. We shall attempt distinctions between the three related concepts: synderesis, prudence, and conscience.

Synderesis is not conscience or prudence, but the three concern the practical mind and acts. By way of definition, in Aquinas' understanding, "'synderesis' is not a power but a 'habit'". Furthermore, Aquinas explicates that synderesis is a special habit of the practical order. Hence, he submits:

> In order to make this clear we must observe that, … man's act of reasoning, since it is a kind of movement, proceeds from the understanding of certain things – namely, those which are naturally known without any investigation on the part of reason, as from an immovable principle – and ends also at the understanding, inasmuch as by means of those principles naturally known, we judge of those things which we have discovered by reasoning. Now it is clear that, as the speculative reason argues about speculative things, so that practical reason argues about practical things. Therefore we must have, bestowed on us by nature, not only speculative principles, but also practical principles. … Wherefore the first practical principles, bestowed on us by nature, do not belong to a special power, but to a special natural habit, which we call 'synderesis'. Whence 'synderesis' is said to incite to good, and to murmur at evil, inasmuch as through first principles we proceed to discover, and judge of what we have discovered. It is therefore clear that 'synderesis' is not a power, but a natural habit.[241]

240 See R. McInerny, "Prudence and Conscience," in *The Thomist* 38 (1974), 291–305, 292. On another similar interpretation regarding the relationship between synderesis and natural law, see also J. Maritain, *Man and the State* (Washington (DC): Catholic University of America Press, 1998), 90. According to Maritain: "The only practical knowledge all men have naturally and infallibly in common as a self-evident principle, intellectually perceived by virtue of the concepts involved, is that we must do good and avoid evil. This is the preamble and the principle of natural law; it is not the law itself. Natural law is the ensemble of things to do and not to do which follow therefrom in necessary fashion."

241 *ST*, I, q. 79, a. 12: "'Synderesis non est potentia, sed habitus', … Ad huius autem evidentiam, considerandum est quod, sicut supra dictum est, ratiocinatio hominis, cum sit quidam motus, ab intellectu progreditur aliquorum, scilicet naturaliter notorum absque investigatione rationis, sicut a quodam principio immobili, et ad intellectum etiam terminatur, inquantum iudicamus per principia per se naturaliter nota, de his quae ratiocinando invenimus. Constat autem quod, sicut ratio speculativa ratiocinatur de speculativis, ita ratio practica ratiocinatur de operabilibus. Oportet igitur naturaliter nobis esse indita, sicut principia speculabilium, ita et principia operabilium. … Unde et principia operabilium nobis naturaliter indita, non

On the other hand, Aquinas discerns that "conscience is not a power, but an 'act'," and he further explains that:

> Conscience, according to the very nature of the word, implies the relation of knowledge to something: for conscience may be resolved into '*cum alio scientia*,' i.e. knowledge applied to an individual case. But the application of knowledge to something is done by some act. Wherefore from this explanation of the name it is clear that conscience is an act. The same is manifest from those things which are attributed to conscience. For conscience is said to witness, to bind, or incite, and also to accuse, torment, or rebuke. And all these follow the application of knowledge or science to what we do.[242]

In addition to the above description of conscience, Aquinas makes room for those who would like to merge or have already fused the two notions, synderesis and conscience. In acknowledgement of this fact he expounds that both incite against evil, but one is the permanent principle of an act, which is conscience, and he clarifies that: "since habit is a principle of act, sometimes the name conscience is given to the first natural habit – namely, 'synderesis': thus Jerome calls 'synderesis' conscience."[243] Despite this, Aquinas clearly distinguishes between synderesis and conscience.

According to Aquinas, "prudence is the 'right reason of things to be done'."[244] He appends elsewhere that, "Right reason which is in accord with prudence is included in the definition of moral virtue, not as part of its essence, but as something belonging by way of participation to all the moral virtues, in so far as they are all under the direction of prudence."[245]

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pertinent ad specialem potentiam; sed ad specialem habitum naturalem, quem dicimus synderesim. Unde et synderesis dicitur instigare ad bonum, et murmurare de malo, inquantum per prima principia procedimus ad inveniendum, et iudicamus inventa. Patet ergo quod synderesis non est potentia, sed habitus naturalis."

242 *ST*, I, q. 79, a. 13: "Conscientia, proprie loquendo, non est potentia, sed actus. ... Conscientia enim, secundum proprietatem vocabuli, importat ordinem scientiae ad aliquid, nam conscientia dicitur cum alio scientia. Applicatio autem scientiae ad aliquid fit per aliquem actum. Unde ex ista ratione nominis patet quod conscientia sit actus. Idem autem apparet ex his quae conscientiae attribuuntur. Dicitur enim conscientia testificari, ligare vel instigare, et etiam accusare vel remordere sive reprehendere. Et haec omnia consequuntur applicationem alicuius nostrae cognitionis vel scientiae ad ea quae agimus."

243 *ST*, I, q. 79, a. 13: "Quia tamen habitus est principium actus, quandoque nomen conscientiae attribuitur primo habitui naturali, scilicet synderesi, sicut Hieronymus, in Glossa Ezech. I, synderesim conscientiam nominat." See also *ST*, I, q. 79, a. 13, ad 3.

244 *ST*, I–II, q. 57, a. 4: "Prudentia ... est recta ratio agibilium."

245 *ST*, I–II, q. 58, a. 2, ad 4: "Recta ratio, quae est secundum prudentiam, ponitur in definitione virtutis moralis, non tanquam pars essentiae eius, sed sicut quiddam participatum in omnibus virtutibus moralibus, inquantum prudentia dirigit omnes virtutes morales."



From the Thomistic stance, Pieper describes conscience as the living unity between prudence and synderesis. On the other hand, prudence (perfected practical reason) is analogous to what he terms 'situation conscience'. This is, he explicates, because prudence applies to specific situations. He expounds that as the understanding of the principles is prerequisite for particular knowledge, so also natural conscience is required for any act of specific (situational) conscience. Hence, he supposes that natural conscience is in intimate relationship to and well-nigh interchangeable with prudence.[246] McInerny, in response to the above submission of Pieper, cogently suggests that, although prudence and conscience presuppose synderesis and natural law, they are not interchangeable.[247]

Actually, prudence and conscience have a close association, and this is demonstrated in Aquinas. Nonetheless, they are far removed from interchangeability. The basic difference is that, although conscience is an act, it is not a habit. *A fortiori* conscience has nothing to do with being a virtue, wherein prudence is located. Thus, Aquinas asserts that conscience "cannot properly be given to the power or the habit, but only to the act. For all the things which are attributed to conscience fit only this meaning."[248] Additionally, in Thomistic understanding, conscience is an act that is a product of a faculty. Subsequently, Aquinas thinks that it is an act of the habit of prudence. In view of this, Aquinas suggests, "The operative habits of reason are applied to an act. These are the habit of synderesis and the habit of wisdom, which perfect higher reason, and the habit of scientific knowledge, which perfects lower reason."[249] Appropriately, the Angelic Doctor delineates that:

> Conscience means the application of knowledge to something. Hence, to be conscious (*conscire*) means to know together (*simul scire*). But any knowledge can be applied to a thing. Hence, conscience cannot denote a special habit or power, but designates the act itself, which is the application of any habit or of any knowledge to some particular act.[250]

The foregoing, which is a general Thomistic view on the act of conscience, serves as a spur to our subsequent discourse. We shall not go into prudence again, as we have underscored its implication in Aquinas previously.[251] Since we have

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246 See J. Pieper, *Prudence* (New York: Pantheon Books, 1959), 26–27.

247 See R. McInerny, "Prudence and Conscience," 292.

248 *De Ver*, q. 17, a. 1.

249 *De Ver*, q. 17, a. 1.

250 *De Ver*, q. 17, a. 1: "Conscientiae significat applicationem scientiae ad aliquid; unde conscire dicitur quasi simul scire. Quaelibet autem scientia ad aliquid applicari potest; unde conscientia non potest nominare aliquem habitum specialem, vel aliquam potentiam, sed nominat ipsum actum, qui est applicatio cuiuscumque habitus vel cuiuscumque notitiae ad aliquem actum particularem."

251 For further details on prudence, see our considerations in this chapter under the subtitle: *A Glance at the Classification of the Intellectual and Moral Virtues*.

highlighted synderesis as our main theme in this section, let us briefly examine its workings.

### *B.3.1 Synderesis as Practical* Habitus Principiorum

As Sellés suggests, Aquinas considers synderesis as analogous to 'natural reason' (*ratio naturalis*).[252] This *ratio naturalis* according to Aquinas is only one in each person[253] and with it an individual also assents to the truth.[254] Synderesis is the habit of the first principles of *ratio practica* whose content is the Thomistic natural law.[255] For this reason, to synderesis corresponds the 'remurmurings' (murmur, protest, complaints, grumbling, and clamour) for anything that does not conform to this natural law.[256] 'Remurmuring' simply denotes a repetitive or an inveterate act. What is the implication of 'remurmur' in the qualification of the action of synderesis? For what does synderesis remurmur? How does this remurmuring arise? We cannot answer these questions without tracing the notion back to its roots.

Although our focus does not include the history of synderesis in the Western philosophical enterprise, we shall touch on a few aspects that could help us buttress our eventual assertions. In some instances, Aquinas still asserts that synderesis is 'innate' in our minds from the very light of the agent intellect (*ex ipso lumine intellectus agentis*).[257] He definitively closes this part of the discourse with the affirmation that synderesis cannot be lost as the speculative habit is not lost. Thus, he articulates it as the practical habit of the human mind.[258] These portraits of synderesis are lofty enough to evoke the need of some kind of historical accent. Hence, to understand this nuance of the notion, synderesis, we shall accentuate its background.

252 See J. F. Sellés, *Los hábitos intelectuales según Tomás de Aquino*, 425. See also *ST*, II–II, q. 47, a. 6, ad 1: "Virtutibus moralibus praestituit finem ratio naturalis quae dicitur synderesis."

253 See *SCG*, II, Ch. 24, n. 3: "Ratio naturalis unius est una tantum."

254 See *ST*, II–II, q. 9, a. 1: "Cum autem homo per naturalem rationem assentit secundum intellectum alicui veritati, dupliciter perficitur circa veritatem illam, primo quidem, quia capit eam; secundo, quia de ea certum iudicium habet."

255 See R. McInerny, "Prudence and Conscience," 292.

256 See *In II Sent*, d. 7, q. 1, a. 2, ad 3: "In synderesi autem sunt universalia principia juris naturalis; unde oportet quod remurmuret omni ei quod contra jus naturale fit. Sed tamen istud murmur est actus naturae." On consideration of the word 'remurmur' used by Aquinas, see also F. Molina, *La sindéresis* (Pamplona: Servicio de Publicaciones de la Universidad de Navarra, 1999), 16.

257 See *In II Sent*, d. 24, q. 2, a. 3: "Unde dico, quod synderesis a ratione practica distinguitur non quidem per substantiam potentiae, sed per habitum, qui est quodammodo innatus menti nostrae ex ipso lumine intellectus agentis."

258 See *In II Sent*, d. 24, q. 2, a. 3, ad 5: "Habitus naturalis nunquam amittitur, sicut patet de habitu principiorum speculativorum, quem semper homo retinet; et simile est etiam de synderesi."



As synderesis was not addressed by either Plato or Aristotle, the concept mainly came through other sources. Apparently, Aquinas or the Scholastics deduced this notion, 'synderesis' from Jerome through Peter Lombard's discourse on synderesis and conscience in the latter's *Sententiarum*.[259] In this presentation, Peter Lombard uses the expression *scintilla rationis* for synderesis. Peter Lombard makes reference to Jerome's commentary that synderesis cannot be extinguished from the human heart. Nonetheless, there is no certitude of the fact that Jerome intended to make distinctions between conscience and synderesis. For Aquinas or the Scholastics, the distinction was important. For this reason, there were two main approaches from the voluntaristic viewpoint, articulated by Bonaventure and other Franciscans, and the intellectual approach followed by Aquinas. Bonaventure presents synderesis as the desire for good, which is parallel to the emotional reaction that results from adhering to evil instead of good. On the other hand, from the intellectual point of view, Aquinas first distinguishes synderesis from conscience and shows that synderesis is the general knowledge of the act of conscience.[260]

Even so, there are similarities in Aquinas of that which one could attribute to Neo-Platonism. This is not to say that Aquinas had a direct influence from Plotinus (Neo-Platonism) about this notion because Aquinas did not read Plotinus directly. It could possibly be that what Aquinas shares in common with Plotinus came through Augustine's influence or through Peter Lombard's *Sententiarum*. For instance, Plotinus (as a Neo-Platonist) holds that the human soul is divine in the sense that it has a nature different from the sensitive qualities because of its universal character. According to Plotinus, our soul is perfected from its endowment with the intellect, which is of two kinds: one is for reasoning; the other makes it possible to reason. According to this hypothesis, the inferior capacity of the soul enables it to vivify (invigorate) the body. On the other hand, the soul's superior capacity gives it the knowledge it seeks. Through the superior capacity of the soul the intellect thinks, desires, wishes; the soul participates in the divine reality. The superior part of the soul induces the reasoning in the lower intellect.[261] This is to say, according to Plotinus, that the part of the intellect that reasons does not need the body for its functions. It is separated from matter to enable it to think purely and intelligibly without relations to time and space.[262] The rational part forms judgments about things that are good and right. The reason for which the mind forms such judgments is that within it, the soul has principles that enable it to affirm and to reason. Such are, for Plotinus, the ideas of justice, goodness, and

259 See *Liber Sententiarum*, III, d. 39, p. 3 (PL 192, 747 A).

260 See J. F. Sellés, *Los hábitos intelectuales según Tomás de Aquino*, 420–421.

261 See Plotinus, *Ennead* V, I, n. 10, 12–14, (From the edition of Cambridge (MA); London: Harvard University Press, 1984 Reprinted 2001).

262 See Plotinus, *Ennead* V, I, n. 10, 15–18.

beauty, which should be pre-contained in the mind.[263] They are contents in the part of the soul that does not reason but that endows the mind with reasoning and whose main characteristic is intuition. Sometimes the soul reasons and, at other times, it does not; but the principles that facilitate reasoning are ever present in the soul. They are always intuited from the intelligence.

According to Plotinus, the soul has always within itself ideas and definitions of justice, good, and beauty. With these principles, the soul participates in the divine, who is the cause of participation, the God of the intellect.[264] This divine is not divided as a corporal magnitude or greatness, and it is not changed from place to place. It is present in all minds that contemplate God. This divine also comes across as the centre of a circle that has its radii spread around it, and all the radii have their points in this very centre. The lines of this circle bring their uniqueness to this centre, but the centre still remains one, immovable, and immutable. According to Plotinus, this is the part of our mind that comes in contact with God. We are with God as if suspended in him, such that, if we move towards him, we become stabilised in him.[265]

Accordingly, Aquinas, within the discourse on moral awareness, underscores in Dionysius that the divine wisdom conjoins first according to the ultimate.[266] The Angelic Doctor, through this fact, reflects what belongs to the doctrine of Plotinus and the Neo-Platonists, which in reality is given to a sequence of being from first to the ultimate without surmounting any degree. This progression shows a semblance of the inferior to the superior as a result of participation, since the inferior receives equally from the superior. It is like the maxim: "every agent produces its like."[267] If in every being there is a superior and an inferior part, in the same way, where there are two contiguous beings involved one after the other, there should be this semblance. Further, Aquinas notes on the part of creatures that there is an order according to which the angelic order comes immediately before the human intellective soul. Since the human intellectual soul is united to the body, the knowledge proper to it is that which stems from the sensitive part to the intelligible component. This is the kind of knowledge, as we accentuated earlier in Chapter Three, that arrives at truth through reasoning. Nonetheless, Aquinas shows that, as the human intellect is capable of participation in the angelic manner of knowing (that of resemblance), it is possible to apprehend truth naturally and unaided. This apprehension of truth in the practical order is 'synderesis'. This

263 See Plotinus, *Ennead* V, I, n. 11, 1–5.

264 See Plotinus, *Ennead* V, I, n. 11, 5–10.

265 See Plotinus, *Ennead* V, I, n. 11, 10–15.

266 See *In II Sent*, d. 39, q. 3, a. 1: "Divina sapientia conjungit prima secundorum ultimis primorum, quia, ut in Lib. De causis ostenditur, in ordine creatorum oportet quod consequens praecedenti similetur, nec hoc potest esse nisi secundum quod aliquid participat de perfectione ejus."

267 *ST*, I, q. 19, a. 4: "Omne agens agit sibi simile." See also *In IV Sent*, d. 1, q. 1, a. 4D. etc.



virtue is fittingly called a spark, as little as a spark from the fire. Thus, Aquinas affirms:

> It is necessary therefore that in the rational soul, which is configured to the Angelic in the order of creatures, there is some participation of intellectual virtue, under which it apprehends some truth without investigation, apprehended as naturally known first principles, both in speculative as well as in practical orders; for which also this virtue is called the intellect, according to which it is in the speculative, and according to what is called synderesis in operative field: and this virtue is conveniently called spark, since like the spark is a small thing that emanates from the fire; so this virtue is a certain moderate participation of intellectuality, compared to what is of intellectuality in the angel: and for this also the superior part of reason is said to be a spark, since it is what is supreme in the rational nature.[268]

Hence, we have *intellectus principiorum* for the speculative intellect and synderesis in the practical order both of which are oriented to the 'natural' grasp of the truth in any intelligible reality. The former obviously is an original Thomistic elaboration through the Aristotelian background, while the latter (synderesis) is linked to Jerome through Peter Lombard.

The Angelic Doctor describes synderesis as *scintilla rationis*. With it the human intellect knows in the way angels do by participation in the higher order. This *scintilla rationis* is the superior part of the intellective soul, that which knows by intuition. This implies that it intuits the first principles or the first laws of thought, those that control the mind to assure that the mind remains on the right path according to the soul's apposite nature. This nature of the intellect conforms to things in order to possess the truth about them. This nature is also such that 'is' and must always be present in the mind while it accomplishes its acts. Since *scintilla rationis* is the knowledge of knowledge, the always-present cognition, it is, therefore, a habit and nature in the intellect of the first practical principles.

In Aquinas, we discover that the *scintilla rationis* is 'faithful' to its nature without being extinguished. The implication, as Giacon corroborates, is that

268 *In II Sent*, d. 39, q. 3, a. 1: "Oportet ergo quod in anima rationali, quae Angelo in ordine creaturarum configuratur, sit aliqua participatio intellectualis virtutis, secundum quam aliquam veritatem sine inquisitione apprehendat, sicut apprehenduntur prima principia naturaliter cognita tam in speculativis quam etiam in operativis; unde et talis virtus intellectus vocatur, secundum quod est in speculativis, quae etiam secundum quod in operativis est, synderesis dicitur: et haec virtus scintilla convenienter dicitur, quod sicut scintilla est modicum ex igne evolans; ita haec virtus est quaedam modica participatio intellectualitatis, respectu ejus quod de intellectualitate in Angelo est: et propter hoc etiam superior pars rationis scintilla dicitur quia in natura rationali supremum est."

according to its nature, it is always right and good in its regulation. Added to the fact that it will never diminish with time, in its nature as *scintilla rationis* it will never diminish in its responsibility to lead itself to truth.[269] Thus, the Angelic Doctor establishes that 'synderesis' does not err just as the speculative intellect does not err in the knowledge of first principles. However, it is always repugnant to anything contrary to the principles naturally instilled in the heart.[270] Synderesis, as much as it is the law of thought, cannot err about the first practical principles. Hence, the maxim, "good must be done and evil is to be avoided" is naturally given to all normal human beings without exception. As such, it is inscribed (written) in every heart.

### *B.3.2 Contents of Synderesis*

Another crucial element we shall consider under this theme is the question of the contents of this *habitus* of moral principles. The idea brings to the fore the Augustinian rational distinction between the superior (higher) and inferior (lower) reason, which is re-examined and elaborated by Aquinas. The first relates to the perfection of reason through wisdom, while the second corresponds to science.[271] Nevertheless, as Sanguineti assumes, their bond with the intellect becomes more manifest in the moral sphere (wherein the habitual *nous* is synderesis, the natural habit of the first principles of moral action).[272]

According to Aquinas, the higher reason is the rule of human behaviour established on 'eternal' criteria that have to do directly with God as the ultimate goal, whereas the lower reason is based on 'temporal' criteria, for the inherent good of human reason, or of man himself. The movement of the appetite that follows the decision of the higher reason is attributable to it, as when someone deliberates on what to do based on what is willed by God, i.e. commanded by his law, or acts in some similar way. To the lower reason instead, belongs the appetitive movement when it follows a judgment of lower reason, as when one decides on the act of operation starting from lower causes, taking into consideration such realities and issues as the ugliness of the act, the dignity of reason, the offence caused to other people and things of this sort.[273]

269 See C. Giacon, *Verità, esistenza, causa*, 70.

270 See *In II Sent*, d. 39, q. 3, a. 1: "Sicut autem non contingit in speculativis intellectum errare circa cognitionem primorum principiorum, quin semper repugnet omni ei quod contra principia dicitur; ita etiam non contingit errare in practicis in principiis primis; et propter hoc dicitur, quod haec superior rationis scintilla quae synderesis est, extingui non potest, sed semper repugnat omni ei quod contra principia naturaliter sibi indita est."

271 *ST*, I, q. 79, a. 9: "Superiori rationi attribuitur sapientia, inferiori vero scientia."

272 See J. J. Sanguineti, "Los principios de la racionalidad en Santo Tomás," 109–137, 134.

273 See *De Ver*, q. 15, a. 3: "Motus appetitus qui consequitur iudicium rationis, rationi attribuitur; ita motus appetitus consequentis deliberationem superioris rationis, attribuitur superiori rationi; utpote cum aliquis deliberat de agendis, ex hoc quod aliquid est deo acceptum, vel



However, we must not think that the lower reason coincides with the pure use of the abstract synderesis. Its general principles apply to both God and for the immanent good of man. For this reason Aquinas clarifies that synderesis precisely denotes neither the higher nor the lower reason but indicates both. Hence, he affirms:

> Synderesis does not denote higher or lower reason, but something that refers commonly to both. For in the very habit of the universal principles of law there are contained certain things which pertain to the eternal norms of conduct, such as, that God must be obeyed; and there are some that pertain to lower norms, such as, that we must live according to reason. [274]

Furthermore, in *De Veritate* Aquinas mentions how the misinterpretations of the principle of synderesis in matters relating to God affected the people and marred the interest of the users. For instance, he appositely observes that the error (of the Jews) did not come from the universal judgment of synderesis, 'that worship should be offered to God'. Rather, it was the outcome of the wrong judgment of higher reason, that it was necessary to kill the Apostles, because it pleased God based on the stated injunction.[275] Aquinas also indicates that the error of the heretics is not that of a negation of the universal principle, because the universal judgment of synderesis remains in them. This is because they judge it to be evil not to believe in God's word. Nonetheless, "they err in higher reason, because they do not believe that God has said" such.[276] Following this, he elucidates further that:

> Error has no place in the general judgment of synderesis, ... but a mistake can occur in the judgment of higher reason, as happens when one judges something to be licit or illicit which is not, as heretics who believe that oaths are forbidden by God. Therefore, mistakes occur in conscience because of the error which existed in the higher part of reason.[277]

divina lege praeceptum, vel aliquo huiusmodi modo. Inferioris vero rationis erit quando motus appetitus consequitur iudicium inferioris rationis ut cum deliberatur de agendis per causas inferiores, utpote considerando turpitudinem actus, dignitatem rationis, offensam hominum, vel aliquid huiusmodi." See also *De Malo*, q. 7, a. 5. [Emphasis added].

274 *De Ver*, q. 16, a. 1, ad 9: "Synderesis neque nominat superiorem rationem neque inferiorem, sed aliquid communiter se habens ad utramque. In ipso enim habitu universalium principiorum iuris continentur quaedam quae pertinent ad rationes aeternas, ut hoc quod est deo esse obediendum; quaedam vero quae pertinent ad rationes inferiores, utpote secundum rationem esse vivendum."

275 See *De Ver*, q. 16, a. 2, ad 2.

276 See *De Ver*, q. 16, a. 3, ad 2.

277 *De Ver*, q. 17, a. 2: "In universali quidem synderesis iudicio, errorem esse non contingit, ... sed in iudicio superioris rationis contingit esse peccatum; sicut cum quis exstimat esse secundum legem dei, vel contra, quod non est: ut haeretici qui credunt iuramentum esse a deo

As such, synderesis remains an absolute unsullied guiding principle, but with the possibility of misinterpretation in the judgment of some particular cases. When such happens, as Aquinas illustrates above, error ensues.

One might ask why synderesis refers to God. As Sanguineti suggests, an adequate response might follow the line of interpretation suggested by the Thomistic texts. For Aquinas, synderesis is not only restricted to the first absolute moral principles ('do good and avoid evil'), but extends also to some proximate conclusions of the 'natural reason' (nearly natural reason), in the sense that man can be seen naturally led to accomplish them, in view of his natural inclinations.[278] Subsequently, there are things that the natural reason of any person judges immediately, which one needs to do or avoid, which belong absolutely to the natural law. Such immediate maxims are: "Honour your father and your mother," "Thou shalt not kill," "Thou shalt not steal," and so on.[279] These, according to the Angelic Doctor lead to the notion of the content of 'do good'. Therefore, in his study of the Decalogue, the Angelic Doctor arrives at a conclusion that these precepts contain those things from the first principles that can be quickly learnt with minimal consideration and others from faith infused by God. And so, Aquinas asserts:

> Wherefore the Decalogue includes those precepts the knowledge of which man has immediately from God. Such are those which with but slight reflection can be gathered at once from the first general principles: and those also which become known to man immediately through divinely infused faith.[280]

From the preceding citation, it is evident that the precepts of the Decalogue contain moral norms, which are halfway between the broader principles of synderesis and its remote conclusions. Hence, according to Sanguineti, they are principles ascribable to synderesis inasmuch as they are natural conclusions of reason, while synderesis still maintains an enormous generality.[281] As such, synderesis implies the 'good' in a generic sense and its all-inclusive character. Consequently, Aquinas affirms that, "the first principle of practical reason is one founded on the notion of good, viz. that 'good is that which all things seek after.'"[282]

prohibitum. Et ita error accidit in conscientia propter falsitatem quae erat in superiori parte rationis."

278 See J. J. Sanguineti, "Los principios de la racionalidad en Santo Tomás," 109–137, 135.

279 See *ST*, I–II, q. 100, a. 1.

280 *ST*, I–II, q. 100, a. 3: "Illa ergo praecepta ad Decalogum pertinent, quorum notitiam homo habet per seipsum a deo. Huiusmodi vero sunt illa quae statim ex principiis communibus primis cognosci possunt modica consideratione, et iterum illa quae statim ex fide divinitus infusa innotescunt."

281 See J. J. Sanguineti, "Los principios de la racionalidad en Santo Tomás," 109–137, 135.

282 See *ST*, I–II, q. 94, a. 2.



Besides, synderesis in an extensive sense, the most immediate conclusions of natural reason, include the perception of the moral necessity to obey God. The implication is that the spontaneous (but rational) knowledge of God is parallel to a proper moral understanding of the general content of the first precept of the Decalogue. In view of the foregoing, justifiably, Sanguineti finds the connectivity of this principle within the entire moral setting.[283]

### B.3.3 *The Practical Mode of Operation of Synderesis*

Aquinas' approach to the operation of synderesis leads directly to a consideration of the question of practical reasoning. This design allows for a strict adherence to Thomistic texts themselves, in which the perception of *ratio practica* is just limited to a kind of philosophical reasoning. The term 'practical reason' (*ratio practica*) in its strictest sense refers exclusively to a sort of reasoning that is parallel to the deductions of speculative science. Synderesis in the works of the Angelic Doctor forms the object of a special, articulate, and distinct investigation from any research on the *habitus* of the speculative principles. This is evident not only in the works where he mostly addressed controversy, but also in the *Summa* where Aquinas shows himself more serene and exposes a previous inclination to the scrutiny of much discussion. Aquinas establishes in each of his investigations a correspondence between the speculative and the practical order. Aquinas considers human knowledge of the precepts of natural law as related to practical reasoning in the same way that the first principles of demonstration are related to speculative reasoning in their operations.

Moreover, Aquinas founds his theory of *recta ratio* on the human capability to discover an original order in any sphere of inquiry. The speculative order that determines metaphysical knowledge is derived from the recognition of the PNC as a unique expression of the *intellectus principiorum*. On the other hand, in the practical order, one essentially starts from the principle that every human act is aimed at an end and concludes with the recognition of the underlying constituent of *recta ratio* as "do good and avoid evil."[284]

Discussing synderesis in his texts, as Pétrin submits, Aquinas assigns proper functions to it, which could be reducible to two. Synderesis' dual basic functions are:

283 See J. J. Sanguineti, *Introduzione alla gnoseologia*, 192–193. According to Sanguineti, this natural assumption of our actions is more evident in the 'moral maxims' which natural reason can ascertain from moral experiences as principles, that is to say, as an expression of its obligations. Some instances are: to love God as the ultimate meaning of our lives, to respect human life, to avoid falsehood, to respect the property of others, to obey legitimate authorities, not to make illicit use of sex, to assist the needy, to assume proper responsibilities of marriage and family, to work conscientiously, to be true to our commitments, and many other moral duties that the conscience perceives when reflecting on its responsibilities to us, and especially to God, the author of the moral law as the creator of the world and man.

284 See *ST*, II–II, q. 79, a. 1.

i) An immediate and infallible grasp of the truths that are the sources of all the reasoning of the practical intelligence, and
ii) The stimulation of the good within the mind and murmurings against evil.[285]

Accordingly, the following elaboration of McCabe partially represents the two fundamental functions. According to him, the beginning of practical reasoning is what one wants. This good is taken for granted, and one deliberates on the means of its achievement. For Aquinas, synderesis is the intellectual understanding of the goal in itself. This is not the same with the attraction and intention to it (since that belongs to the realisation of the will) but the actual understanding. Synderesis is always there as the prompter at the inception of an act for a proper grasp of its implications. This would be the conclusion of a particular situation, which could be a beginning in another one, and synderesis should always be there at each commencement. Considering this relational character about synderesis, McCabe submits that when we examine bits of practical reasoning separately, we discover that we intellectually apprehend with synderesis that which we intend by the will, consider attractive (good) as an end, and by the practical reasoning we make a decision on the action about the thing.[286]

If we further identify some of the passages where Aquinas speaks of the two *habitus primorum principiorum*, we find that he implies a plurality. This principle that comprises the universal laws of moral behaviour ordains all subsequent moral reasoning. According to Westberg, synderesis reduces the need for prudence to comprehend the ends of action.[287] This is to say that it is properly the fundamental task of synderesis to know the ends of human action and, from its own understanding, other virtues and habits take their lead. In view of this import in synderesis, Aquinas affirms: "Hence it follows that prudence is more excellent than the moral virtues, and moves them: yet 'synderesis' moves prudence, just as the understanding of principles moves science."[288] Besides, Aquinas' view portrays that the first principle in *ratio practica* has the character of the good. This means that the good is that which everything seeks, the end of all, especially, of all human actions and cravings. Hence, the good is the nucleus in the fundamental principle of law, which states that: "good should be done and evil avoided. "Thus Aquinas affirms, "This is the first precept of law, that 'good is to be done and pursued, and evil is to be avoided.'"[289]

285 See J. Pétrin, "L'habitus des principes spéculatifs et la syndérèse," in *Revue de l'Université d'Ottawa* 18 (1948), 208–216, 210.
286 See H. McCabe, "Aquinas on Good Sense," 426.
287 See D. Westberg, *Right Practical Reason*, 29.
288 See *ST*, II–II, q. 47, a. 3: "Unde relinquitur quod prudentia sit nobilior virtutibus moralibus, et moveat eas. Sed synderesis movet prudentiam, sicut intellectus principiorum scientiam."
289 *ST*, I–II, q. 94, a. 2: "Hoc est ergo primum praeceptum legis, quod bonum est faciendum et prosequendum, et malum vitandum."



Consequently, Aquinas pinpoints that all other precepts of natural law are based on this precept of natural law. *Ratio practica* naturally understands these precepts to be human goods. Aquinas clarifies here that reason is not directed to conclusions as in the speculative reasoning. In matters of action, truth or *rectitudo practica* is not the same for all, as regards matters of details, but only as to the common principles. In view of this fact, Aquinas submits that, "... in matters of action, truth or practical rectitude is not the same for all, as to matters of detail, but only as to the general principles: and where there is the same rectitude in matters of detail, it is not equally known to all."[290] This view of Aquinas is depicted in Ladrière in his proposal that human action is connected with the contingent and particular. The first principles in the practical order are known by synderesis, which enables the human action. Hence, right reason (*recta ratio*) through the principles supplied through synderesis and the use of the rules of reasoning brings the human reasoning to ascertain conclusions that are guides in morality.[291]

Since the objective of *ratio practica* is action and not knowledge, the truth realised by the intellect must be through its conformity to right desire. There is 'no necessary' science of practical reason since virtuous acts give room for variety and derivation from the universal law on specific issues. This is the notion of 'practical truth'. If there were any science of the practical reason, it would be the science of morality. But that is flexible in the 'practical-practical'[292] sphere

290 *ST*, I–II, q. 94, a. 4: "In operativis autem non est eadem veritas vel rectitudo practica apud omnes quantum ad propria, sed solum quantum ad communia, et apud illos apud quos est eadem rectitudo in propriis, non est aequaliter omnibus nota." See also *In VI Ethica*, lect. 2, n. 8: "Ea autem quae sunt ad finem, non sunt nobis determinata a natura, sed per rationem investigantur; sic ergo manifestum est quod rectitudo appetitus per respectum ad finem est mensura veritatis in ratione practica." See also *In III Sent*, d. 33, q. 1, a. 1B: "Sicut speculativa ratio dicitur esse recta secundum quod se conformiter ad prima principia habet; ita etiam ratio practica dicitur recta ratio secundum quod se habet conformiter ad rectos fines."
291 See J. A. Ladrière, "Reasoning," in *New Catholic Encylopedia* vol. XII (Washinghton, (DC): The Catholic University of America, 1967), 120. In Ladrière's own words: "Human action is concerned with the particular and the contingent. But there are first principles in the practical order, as in the speculative, and a corresponding habit that enables man to come to knowledge of such principles, viz, synderesis. Right reason (*recta ratio*), starting with the principles furnished by synderesis and using the rules of reasoning (exactly as in the speculative order), establishes conclusions that constitute the rules of morality."
292 The expression practical-practical is not present in Aquinas. It is a modern Thomistic distinction used by authors, like Maritain, to distinguish between the different levels of the practical sphere. There are two principal aspects, the speculative and practical (ethical). Subsequent to this distinction in the practical area, there is another subdivision of the theoretical level (theory of ethics) and the practical level (in the sense of prudence i.e. *hic et nunc*). Thomists, like Maritain, use the expression theoretical-practical for theory of the ethics and practical-practical to stand for the actual practical level. Consequently, when we use practical-practical, we imply the prudential aspect of the ethical sphere. For some instances on this usage in Maritain, see J. Maritain, *An Introduction to the Basic Problems of Moral Philosophy*

(though general moral principles are known with certainty and necessity). This could be the reason Aquinas refers to judgments through and propositions being held by synderesis.[293] This demonstrates that for Aquinas synderesis is the arbiter of our understanding because of its content of the precepts of the natural law. Hence, he expounds: "'Synderesis' is said to be the law of our mind, because it is a habit containing the precepts of the natural law, which are the first principles of human actions."[294]

Furthermore, scholars, like Westberg, think that the application of synderesis seems to articulate a real distinction between the part of the intellect that possesses knowledge of moral principles and the more concrete and 'practical-practical' moral knowledge that differs according to individuals. Conversely, he considers that without such distinctions it might be difficult to uphold the twofold notions of reliability and knowability of moral principles and the allowance for the likelihood of either mistakes or ignorance in people.[295]

Consequently, by way of operation, synderesis is the ultimate understanding of the practical principles inherent in the human intellect. Aquinas does not equate it with reason as simple reason, since reason is discursive in its own operation, but he illustrates that the knowledge proper to it is intuitive.[296] Because of its natural (intuitive) endowment as opposed to discursiveness, it can never err,

(Albany (NY): Magic books, 1990), 173–174; see also J. V. Schall, *Jacques Maritain: the Philosopher in Society* (Lanham (MD) [etc.]: Rowman and Littlefield, 1998), xiv; 31.

293 See *ST*, I–II, q. 90, a. 1, ad 2: "Ita in operibus rationis est considerare ipsum actum rationis, qui est intelligere et ratiocinari, et aliquid per huiusmodi actum constitutum. Quod quidem in speculativa ratione primo quidem est definitio; secundo, enunciatio; tertio vero, syllogismus vel argumentatio. Et quia ratio etiam practica utitur quodam syllogismo in operabilibus, ut supra habitum est, ... ideo est invenire aliquid in ratione practica quod ita se habeat ad operationes, sicut se habet propositio in ratione speculativa ad conclusiones. Et huiusmodi propositiones universales rationis practicae ordinatae ad actiones, habent rationem legis. Quae quidem propositiones aliquando actualiter considerantur, aliquando vero habitualiter a ratione tenentur."

294 *ST*, I–II, q. 94, a. 1, ad 2: "Synderesis dicitur lex intellectus nostri, inquantum est habitus continens praecepta legis naturalis, quae sunt prima principia operum humanorum."

295 See D. Westberg, *Right Practical Reason*, 100.

296 See *In II Sent*, d. 24, q. 2, a. 3: "Ita etiam oportet quod sit in processu rationis; cum enim ratio varietatem quamdam habeat, et quodammodo mobilis sit, secundum quod principia in conclusiones deducit, et in conferendo frequenter decipiatur; oportet quod omnis ratio ab aliqua cognitione procedat, quae uniformitatem et quietem quamdam habeat; quod non fit per discursum investigationis, sed subito intellectui offertur: sicut enim ratio in speculativis deducitur ab aliquibus principiis per se notis, quorum habitus intellectus dicitur; ita etiam oportet quod ratio practica ab aliquibus principiis per se notis deducatur, ut quod est malum non esse faciendum, praeceptis dei obediendum fore, et sic de aliis: et horum quidem habitus est synderesis. Unde dico, quod synderesis a ratione practica distinguitur non quidem per substantiam potentiae, sed per habitum, qui est quodammodo innatus menti nostrae ex ipso lumine intellectus agentis."



since it comprises mainly the habitual knowledge of the general principles of the practical realm. Through these it prompts to good action.[297] On the other hand, as we have already underscored, Aquinas does not detach synderesis entirely from *ratio*. In fact, Aquinas himself in an attempt to show its distinctive quality of infallibility designates synderesis more precisely as *superior scintilla rationis*.[298] So, synderesis is a habitual endowment by nature whose operation makes it possible for the human mind to attune to the natural law as something more than just codified principles.

### *B.3.4 An Evaluative Synopsis on the Thomistic Notion of Synderesis*

Some critics hold that apart from the sentences, Aquinas appears to have dedicated very scanty space to this argument that he considers essential for human knowledge and the practical life. Following this, he seems ambiguous to have given only meagre attention to synderesis. With the exception of about three articles in *De Veritate* and in the *Summa Theologiae* where he appears to have reduced the whole concept into 'do good',[299] he seems thin in content on the theme. For some scholars, like Crowe, this breeds a feeling of dissatisfaction.[300] Nonetheless, this is a sort of misconception for the work of the Angelic Doctor on this fundamental principle in the practical order. Authors, like Payer, mistakenly connect Aquinas'

297 See *ST*, I, q. 79, a. 12: "Unde et principia operabilium nobis naturaliter indita, non pertinent ad specialem potentiam; sed ad specialem habitum naturalem, quem dicimus synderesim. Unde et synderesis dicitur instigare ad bonum, et murmurare de malo, inquantum per prima principia procedimus ad inveniendum, et iudicamus inventa. Patet ergo quod synderesis non est potentia, sed habitus naturalis."

298 See *In II Sent*, d. 39, q. 3, a. 1: "Sicut autem non contingit in speculativis intellectum errare circa cognitionem primorum principiorum, quin semper repugnet omni ei quod contra principia dicitur; ita etiam non contingit errare in practicis in principiis primis; et propter hoc dicitur, quod haec superior rationis scintilla quae synderesis est, extingui non potest, sed semper repugnat omni ei quod contra principia naturaliter sibi indita est." On further reading about the relationship between *ratio superior* and *inferior* with synderesis, see R. W. Mulligan, "Ratio Superior and Ratio Inferior in St. Albert and St. Thomas," in *The Thomist* 19 (1956), 339–367 esp. 350–362.

299 See *ST*, I–II, q. 94, a. 2.

300 On details of the confused notion of authors, like Crowe, see Brown's critical evaluation in O. J. Brown, *Natural Rectitude and Divine Law in Aquinas: An Approach to an Integral Interpretation of the Thomistic Doctrine of Law* (Toronto: Pontifical Institute of Mediaeval Studies, 1981), 175–177. Crowe thinks that the laconic appearance of synderesis, especially in the *Summa Theologiae*, is a sign that the word itself is a scribal error arising from an erroneous substitution of the word, *syneidesis* (*conscientia*). On this notion, see M. B. Crowe, "Synderesis and the Notion of Law in St. Thomas," in *Actes du premier congrès international de philosophie médiévale, Louvain-Bruxelles*, 1958 (Louvain: Nauwelaerts, 1960), 605. However, Siebeck thinks differently about the word. For him, the word synderesis is correct and its usage is in order. For further reading on his view, see also: H. Siebeck, "Noch einmal die Synteresis," in *Archiv für Geschichte der Philosophie* 10 (1897), 520–529.

work on synderesis to that of St. Albert where the latter conceives conscience as a *scientia* and deontic propositions are derived to serve as guides of moral life.[301] As Westberg suggests, such criticisms seem unsuitable for the system of Aquinas since he does not approach synderesis from the viewpoint of St. Albert as such.[302] Synderesis in Aquinas is not for the derivation of specific principles of the moral order. Instead, Aquinas explicitly shows that synderesis gives the disposition or the basis on which value judgments of intentions and actions are made.

Subsequently, Aquinas' introduction and notion of synderesis does not nullify or twist the Aristotelian view on practical reason as some have proposed. It does not make prudence a casuistry legalism. Rather, it fine-tunes, solidifies, and redirects the Aristotelian theory of practical reason and clarifies the notion of prudence as is evident from the above considerations. Moreover, Elders' commentary on Aquinas' use of the expression of *recta ratio* shows that Aquinas is in complete accord with Aristotle. The Thomistic supplement of *recta* to *ratio* is a demonstration of the role of *ratio* in determining moral norms. Elders, therefore, substantiates that as reason cannot make itself right, there is need for a facilitator of the *recta ratio*. This is the duty of the synderesis (a fruit of true insight) to reason with its content of the first practical principles. Hence, Aquinas' proposal of *recta ratio* ethics is a kind of transposition to the Aristotelian ethical philosophy.[303] This Thomistic fortification of the ethical notion of Aristotle is mostly felt through the introduction of synderesis as a key element in attaining one's end. Aquinas himself was conscious of the fact that he was loyal to the Aristotelian legacy. In view of this fact, Elders further suggests that by introducing synderesis, Aquinas remained with the conviction that he was still within the structure of the Aristotelian view. Nevertheless, his doctrinal input embellished Aristotle's views and solved more problems that Aristotle could not have effectively handled.[304]

Considering the above, one could fittingly maintain that Aquinas' introduction of synderesis and seemingly brief treatment is to highlight its distinction from conscience and prudence. Simultaneously, Aquinas uses the submissions on synderesis to underscore its indispensable role in the practical life and to show that without such understanding of the principles of practical reason, the mind may not function properly as to the end of human acts. Apparently, Aquinas does not work on synderesis from a confused state, as Crowe seems to propose. In line with Brown, we think that having been found in a time when there was a kind of

301 See P. J. Payer, "Prudence and the Principles of Natural Law: A Medieval Development," *Speculum* 54 (1979), 55–70. In this article, Payer connects Aquinas' attempt with St. Albert's notion on prudence wherein St. Albert considers prudence as an application of a group of principles to specific conditions.

302 See D. Westberg, *Right Practical Reason*, 102–103.

303 See L. J. Elders, *Autour de Saint Thomas d'Aquin: recueil d'études sur sa pensée philosophique et théologique* Vol. I, (Paris; Brugge: FAC; Tabor, 1987), 98.

304 See L. J. Elders, *Autour de Saint Thomas d'Aquin*, 101.



mélange between *conscientia-synderesis*, Aquinas wishes to clarify the difference between the *habitus* of the first practical principles (synderesis) and conscience as an *actus*.[305] This could explain further why he does not devote much space to synderesis in his later works, as in the *Summa Theologiae*, as some seem to allege.

Furthermore, because of its primary role, the Thomistic notion of synderesis is not interchangeable with any other notion of the practical order. It is essential for the twofold kinds of reasoning in the practical realm. As Bourke shows in his contrast between synderesis and the PNC, synderesis is the starting point for the sort of reasoning about universal principles of morality typically identifiable with the scientist (theologian or ethicist), just as the PNC is the theoretical paradigm. Thus, synderesis fundamentally governs all on correct reasoning about practical issues in general. Another type of reasoning that is governed by synderesis is on the personal level. This involves prudence and human actions.[306] In this illustration, anybody (expert or non-expert) is informed in the mind (knows by this habit) of the imperative that good should be done and evil avoided without an exact formal formulation of synderesis. This implies that synderesis is always present in all normal persons as a natural insight (a prompting) towards the 'good'. It is an objective underlying understanding of the principles by its 'remurmurings' against evil. Subsequently synderesis, as McCabe suggests, is in its ultimate sense the natural inclinational apprehension of the ultimate principle[307] without being this or that more concrete principle. In the same vein, we affirm that although it can be stated as "do good and avoid evil," it does not as such belong to any specific principle or law. Thus, in consideration of the preceding and in line with González, we establish further that, without synderesis, the laws alone do not and cannot constitute a definitive measure for the practical life.[308]

Justifiably through synderesis, as Sanguineti puts forward, we affirm and understand more the implication of our liberty as human beings. We experience our liberty in our ability to do or not to do some things. The reason is not simply because we are endowed with the physical competence but principally because of our 'willingness'. Simultaneously, through reasoning we discover that our fellow creatures have needs of certain goods, such as material objects, good health, respect, good repute, love, relationship with God, and that evil in contrast should be avoided.[309] In addition, to the extent that these needs are dependent on our 'will',

305 See O. J. Brown, *Natural Rectitude and Divine Law in Aquinas*, 177.

306 See V. J. Bourke, "The Background of Aquinas' Synderesis Principle," in L. P. Gerson, ed. *Graceful Reason: Essays in Ancient and Medieval Philosophy Presented to Joseph Owens, C.Ss.R., on the Occasion of his Seventy-fifth birthday and the Fiftieth anniversary of his Ordination* (Toronto: Pontifical Institute of Mediaeval Studies, 1983), 345–360, 359–360.

307 See H. McCabe, "Aquinas on Good Sense," 426–427.

308 See A. M. González, "Depositum Gladius non debet Restitui Furioso: Precepts, Synderesis, and Virtues in Saint Thomas Aquinas," in *The Thomist* 63 (1999), 217–240, 224.

309 See J. J. Sanguineti, *Introduzione alla gnoseologia*, 191.

surges forth the notion of our moral duty or obligation and our responsibility (negatively, there arises an analogous notion of 'moral prohibition'). Parallel to the obligation is the notion of 'law' or 'moral norm'. For instance, it could be that one is physically capable of harming or exterminating another, but he grasps through the intelligence that this other life is to be respected. In this way, we become responsible for the life of others in good and bad. Our action is 'good' when we respect the life of another; otherwise, it turns to 'evil'. 'Our' interpretation (connotation) is essential: precisely that the moral obligation directly involves our person.

Moreover, based on moral experiences – to do good or evil to others, to sustain good or evil from others – each person can understand that, to the extent that he/she is free, he/she has always implicitly known the first and most universal moral principle, that is the primeval habit of morality, articulated by Aquinas, as synderesis. This principle is that whose operating force is comparable to the indelible principle of non-contradiction: hence "we are obliged personally to do good and avoid evil."[310] Sanguineti decodes further that this principle, always understood in 'universal intersubjective' terms, governs the conduct of every person in relation to himself and to any other person. Indeed, since each tends to provide the good for himself and to neglect the good of others, the principle could be made more explicit in regard to our fellow creatures: "I must do good to others and avoid giving them evil."[311]

On the other hand, since to do good can be considered an act of justice in a broad sense, or an act of love, the principle could be reformulated as follows: "We are obliged to act justly with every other person, indeed, we must love our neighbour."[312] In view of the fact that the love of neighbour – to desire his good and to wish him good – corresponds to our behavioural responsibility to ourselves, we can, then, as well say that, "we must love our neighbour as ourselves."[313]

Finally, in view of the foregoing, the Angelic Doctor confirms that moral matters that are within the realm of *ratio practica* are diverse and sometimes deficient in the 'practical-practical' field. For this reason, they cannot provide the certitude as in speculative reasoning. It is these diversities and distinctions amid the acts of will that led Aquinas to the use of the expression '*ratio practica*' for the specific distinction of the process of practical order, which is strictly variant from the scientific knowledge.

Above all, although Aquinas does not invent the formula of 'do good and avoid evil,' his import is striking. The biblical maxim: 'do good and avoid evil' is, as it were, a commonplace even among previous Christian writers.[314] However,

310 See J. J. Sanguineti, *Introduzione alla gnoseologia*, 191–192.
311 See J. J. Sanguineti, *Introduzione alla gnoseologia*, 192.
312 See J. J. Sanguineti, *Introduzione alla gnoseologia*, 192.
313 See J. J. Sanguineti, *Introduzione alla gnoseologia*, 192.
314 See V. J. Bourke, in L. P. Gerson, ed. *Graceful Reason*, 355.



Aquinas in an exceptional way affirms its specific irreplaceable role in ethics as the understanding of the practical principles and this, in turn, points to the 'good' (*bonum*) that is metaphysically interchangeable with the transcendental truth (*verum*). Ultimately, the good is not just finite. The human mind seeks the necessary good, which when discovered is the infinite principle of the good, the Good personified, the end of all (*Sapientia*). Thus, Aquinas' notion of synderesis shows that it is an archetype of *ratio* since it is likened to *scintilla rationis* (the spark of reason) and *ratio naturalis* that ignite true reasoning.

## C. Aquinas and the Problem of Innatism

Our discourse, so far, has presented us with the notion of 'innateness' of the *habitus principiorum* in Aquinas.[315] Undeniably, the Thomistic realistic philosophy is not one infested with innatism as in doctrines, such as Platonism and Descartes' Rationalism. Yet, Aquinas obviously presents the double-faceted notions of *habitus principiorum* with the underlying idea of innatism (or better, with an innatist stance). On reading Aquinas we perceive a Platonic or Augustinian nuance (tendency). The repeated Thomistic use of the word 'natural' in these contexts makes the tenet more manifest. This is a dilemma into which, on studying Aquinas closely, on *habitus*, especially *habitus principiorum*, we are plunged. Surely it does not seem to deter us from stating positively that Aquinas is Aristotelian. There could be a reason for such an apparent tenet in Aquinas.

With the exception of a few scholars like Durantel,[316] Bradley,[317] and Sanguineti,[318] some Thomists have either relegated 'innatism' in Aquinas to the background or have thought it absurd and irrelevant. Nonetheless, Klassen recently has

315 See *ST*, I–II, q. 51, a. 1.
316 See J. Durantel, *Le retour à Dieu par l'intelligence et la volonté dans la philosophie de S. Thomas* (Paris: Félix Alcan, 1918), 156–169. In the cited work, Durantel considers the first principles as innate.
317 See F. Percivale, *Da Tommaso a Rosmini: indagine sull'innatismo con l'ausilio dell'esplorazione elettronica dei testi* (Venezia: Marsilio, 2003). The entire work is dedicated principally to innatism in Aquinas and, subsequently, Rosmini.
318 See D. J. M. Bradley, *Aquinas on the Twofold Human Good: Reason and Human Happiness in Aquinas's Moral Science* (Washington, (DC): The Catholic University of America Press, 1997). Bradley's musing concerns the practical aspect of our inquiry, but it also holds for the theoretical. In one of the instances, he suggests that "the natural law consists of innate first principles of practical reason." See *ibid*, 134. He adds that synderesis is "in a certain way innate" and "quasi-innate" and he definitively says "'innate' principles". (See *ibid*, 291–292, 299–300). See also J. J. Sanguineti, "El conocimiento personal de los primeros principios," 713–727, esp. 715; 725.

acknowledged this notion in Aquinas as literally correct. He also encourages the totality of its acceptance by other Thomists.[319] Yet, in order to avoid a face-value verdict on the problem of its appreciation, we shall inquire into Aquinas' use of *innatus*[320] in this part of our research. That could help us also to understand better Aquinas' notion of the twofold *habitus principiorum* in the speculative and practical order respectively. The intended study will bring us to first examine concisely the root of *habitus principiorum*. The attempt is geared towards an enhanced understanding of our theme in this section.

### *C.1 The Origin of* Habitus Principiorum: *the Inception of the Problem of Innatism*

With regards to the knowledge of *habitus principiorum*, Aquinas uses the word 'natural' or 'naturally'[321] in its qualification. What could be the genuine principal origin of the *habitus principiorum*, since it is apparently 'innate' in Aquinas' conception? To tackle this question adequately, we need to refer to Aquinas' hypothesis about the source or formation of *habitus* itself. Through the above survey of Aquinas, we ascertained the fundamental nature of the twofold *habitus* involved. We need to be cautious in our explications here, because this is another very subtle but insightful aspect of Aquinas resulting from its profound character. The original intuition of the mind is explicable only through a first precise judgment of *ens* as *ens non est non-ens*. This intellectual verdict is uncaused by way of ordinary reasoning (*ratio*). According to Aquinas, it is incisively born out of the 'nature' of *intellectus* itself, together with the intelligible species. Inagaki suggests that our assent to the truth by the natural habit is caused by the actual nature of our intellectual soul.[322] This explicates that the human modality of knowledge is tied

319 See D. J. Klassen, *Thomas Aquinas and Knowledge of the First Principles of the Natural Law*, (unpublished dissertation of Washington, (DC): The Catholic University of America, 2007), 314–420, esp. 314.

320 See *De Ver*, q. 16, a. 1, ad 14.

321 See *In II Sent*, d. 39, q. 2, a. 2, ad 4: "Ex virtute primorum principiorum, quae sunt naturaliter cognita, habet ut veritatem cognoscat." See also *In II Sent*, d. 39, q. 3, a. 1: "Sicut apprehenduntur prima principia naturaliter cognita tam in speculativis quam etiam in operativis; unde et talis virtus intellectus vocatur, secundum quod est in speculativis, quae etiam secundum quod in operativis est, synderesis dicitur." See also *In II Sent*, d. 39, q. 3, a. 2: "Haec autem principia agendorum naturaliter cognita ad synderesim pertinent." See also *SCG*, III, Ch. 43, n. 2: "Ostendit enim primo, quod necesse est ponere quod intellectus agens se habeat ad principia naturaliter cognita a nobis vel sicut agens ad instrumentum, vel sicut forma ad materiam." See also *ST*, I–II, q. 51, a. 1, sc: "Inter alios habitus ponitur intellectus principiorum, qui est a natura, unde et principia prima dicuntur naturaliter cognita." See also *ST*, I–II, q. 63, a. 1; *ST*, II–II, q. 49, a. 2, ad 1; *De Ver*, q. 27, a. 3; *In V Ethica*, lect. 12, n. 3; *In IV Metaph*, lect. 6; etc.

322 See B. R. Inagaki, "*Habitus* and *Natura* in Aquinas," 170.



to the sensitive and intellectual knowledge. The two components are always perceived from Aquinas' presentation of the ontological human constitution and apprehension. Both are irrevocably essential in the human nature and for the human person to know. In an attempt to illustrate this human phenomenon, Aquinas uses the expression *ex ipsa enim natura animae intellectualis*. Hence, Aquinas says:

> There are, therefore, in man certain natural habits, owing their existence, partly to nature, and partly to some extrinsic principle: in one way, indeed, in the apprehensive powers; in another way, in the appetitive powers. For in the apprehensive powers there may be a natural habit by way of a 'beginning', both in respect of the specific nature, and in respect of the individual nature. This happens with regard to the specific nature, on the part of the soul itself: thus the understanding of first principles is called a natural habit. For it is owing to the very nature of the intellectual soul… this he cannot know except through the intelligible species which he has received from phantasms.[323]

Thus, the nature of a soul (namely, the *intellectus agens*) is the essential origin of the principal *habitus principiorum* through a minimal reception of a phantasm that acts as a kind of activator of the intellect's nature, basically to know according to the truth of things in reality. Aquinas lucidly deduces that the *habitus principiorum* is directly originated by the action of the very core of *intellectus* that is the *intellectus agens*, when he says:

> Wherefore if in the 'possible' intellect there be a habit caused immediately by the active intellect, such a habit is incorruptible both directly and indirectly. Such are the habits of the first principles, both speculative and practical, which cannot be corrupted by any forgetfulness or deception whatever.[324]

Hence, the above Thomistic submission substantiates the first premise that *habitus principiorum* is of the 'very nature' (*ipsa natura*) of the intellect. The active intellect is the hub and *principium activum* of *intellectus*. This implies that as the *principium activum*, *intellectus agens* forms and informs the entire faculty,

323 See *ST*, I–II, q. 51, a. 1: "Sunt ergo in hominibus aliqui habitus naturales, tanquam partim a natura existentes et partim ab exteriori principio; aliter quidem in apprehensivis potentiis, et aliter in appetitivis. In apprehensivis enim potentiis potest esse habitus naturalis secundum inchoationem, et secundum naturam speciei, et secundum naturam individui. Secundum quidem naturam speciei, ex parte ipsius animae, sicut intellectus principiorum dicitur esse habitus naturalis. Ex ipsa enim natura animae intellectualis… cognoscere non potest nisi per species intelligibiles a phantasmatibus acceptas." [Emphasis added].

324 See *ST*, I–II, q. 51, a. 1.

it activates the possible intellect to complete the action of the intellect. From *ipsa natura* the intellect receives its perfection and develops itself. The intellect is endowed by 'its very nature' with an active principle/power that perfects it on the finite level. This *principium activum* induces it to reach out to the immaterial principle beyond its capacity, in which its knowledge is completed on either the speculative or the practical order, the 'truth' and 'good', respectively. However, as the scope of this research is limited, we shall not delve much into this aspect of the analysis. Our aim is to accentuate the comprehensive nature of the intellect.

The *intellectus agens* 'naturally' informs *intellectus possibilis*, by way of generating its stable habits, which in turn translates as the offshoot, the *habitus principiorum*. This explains why Aquinas describes the *intellectus agens* among others as *lumen* (light)[325] and as act.[326] The notion of *intellectus agens* as light has an Augustinian nuance in the doctrine of illumination. Some may find this element as an oddity in Aquinas. Nevertheless, it is this link and connectedness of the Thomistic fundamental notions that brought Thomists, like Fabro[327] and Mondin,[328] to articulate the Thomistic metaphysics as the metaphysics of participation. This brings us back to the initial question that led to the above various considerations concerning 'innatism' in Aquinas. If nature is actually the true root of the intellect's own interactivity, is Aquinas wrong in his proposal about the 'natural'? This will constitute part of our study in the subsequent discourse.

### C.2 *Aquinas' Notion of Innateness*

We are confronted here with either the acceptance of the possibility of innatism in the Angelic Doctor or an attestation to the contrary that Aquinas is genuinely balanced in his views. The problem and notion of innatism in Aquinas is crucial in the Thomistic metaphysics. This innatist view in the Angelic Doctor principally goes with the action of the human *intellectus agens* that is entrenched in the Thomistic notion of participation in the divine intellect. The human intelligence according to Aquinas participates in the divine through the action of the agent intellect.

325 See *In II De Anima*, lect. 11, n. 15; See also J. Durantel, *Le retour à Dieu*, 158–170. In part of his explication, Durantel succinctly assumes that *intellectus agens* is primitively a first emanation of the intelligence that guards its divine character and furnishes the human intelligence with the 'light' of all the content of our knowledge. See *ibid*, 170 [Emphasis added]. We shall come back to the agent intellect shortly.

326 See *In II Sent*, d. 17, q. 2, a. 1.

327 See C. Fabro, *La nozione metafisica di partecipazione*, 9–40 esp. 14–25; 325–332; 266–285; 342–347.

328 See B. Mondin, *La metafisica di S. Tommaso d'Aquino e i suoi interpreti*, 20–23.



#### a. *Illumination and Participation*

In Aquinas this hypothesis hinges greatly on divine illumination. As Pasnau appropriately asserts, Augustine's illumination is at the core of Aquinas' considerations on intellective cognition.[329] However, unlike Augustine,[330] Aquinas' understanding of illumination is detached from the direct generation of light or enlightenment of the intellect coming from God. For Aquinas, knowledge is largely from a real situation that justifies 'secondary causes', a combination of the instantaneous light from the agent intellect on *habitus principiorum* and the extrinsic factor coming from the senses. The Thomistic notion of *intellectus agens* has its pivotal fulcrum in the concept of divine illumination. According to Aquinas, through the gradation of light ultimately arising from the divine, the human intellect shares in this divine illumination as the lowest in the hierarchy of created intellects after the angelic intellects. This implies that the human intellect, in its position in the gradation, has an *influentia divini luminis*.[331] This illuminating influence diminishes with the hierarchy of intellectual beings. Hence, the angelic order is higher and more powerful than the human order,[332] which is only 'virtual' in accordance with the admixture of matter and intellect in the human mode of existence. In this idea, also, is the Thomistic articulation of the senses and the primordial notions of the habitual knowledge of the first principles (*principia prima naturaliter cognita*).[333]

From the foregoing, it is comprehensible that Aquinas recognises in the human mind, though in a deficient manner, that which originally and naturally belongs to God, namely, divine illumination. Thus, the human luminous core indispensably constitutes the primordial (habitual) operation in the intellective faculty, a sharing in the divine.[334] This Thomistic notion illustrates that the human

329 See R. Pasnau, *Thomas Aquinas on Human Nature: a Philosophical Study of Summa Theologiae*, 1. 75–89 (Cambridge; New York: Cambridge University Press, 2002), 307.

330 See Augustine, *Confessions*, IV, xv, 25; J. J. O'Donnell, ed. (Oxford: Clarendon Press, 1992: "Qualis in me tunc erat nesciente alio lumine illam inlustrandam esse, ut sit particeps veritatis, quia non est ipsa natura veritatis, quoniam tu inluminabis lucernam meam, domine."

331 See *ST*, I, q. 89, a. 1, ad 3; See also *ST*, I, q. 89, a. 3.

332 See L. D'Izzalini, *Il principio intellettivo della ragione umana nelle opere di S. Tommaso d'Aquino: studio storico-speculativo* (Romae: Apud Aedes Universitatis Gregorianae, 1943), 93–95.

333 See *ST*, I–II, q. 51, a. 1, sc.

334 See *De Ver*, q. 15, a. 1: "Quamvis cognitio humanae animae proprie sit per viam rationis, est tamen in ea aliqua participatio illius simplicis cognitionis quae in superioribus substantiis invenitur, ex quo etiam intellectivam vim habere dicuntur." See also *In I Sent*, d. 3, q. 4, a. 1, ad 4: "Natura inferior secundum supremum sui attingit infimum naturae superioris; et ideo natura animae in sui supremo attingit infimum naturae angelicae; et ideo aliquo modo participat intellectualitatem in sui summo. Et quia secundum optimum sui assignatur imago in anima, ideo potius assignatur secundum intelligentiam, quam secundum rationem; ratio enim nihil aliud est nisi natura intellectualis obumbrata: unde inquirendo cognoscit et sub continuo tempore quod intellectui statim et plena luce confertur; et ideo dicitur esse

intelligence would not actually exist if it had no connection with the divine light. In line with this, Pasnau fittingly suggests that there is no knowledge *ex nihilo* in Aquinas' view.[335] Even so, Aquinas simultaneously avoided the Augustinian nuance in the theory of illumination by positing the *habitus principiorum* which participates in this divine light through the action of *intellectus agens* as a secondary cause. It is as if Aquinas asserted that the human person is endowed primarily with the senses for information gathering and the natural disposition that illumines this information with actual knowledge. This original disposition as we pointed out earlier is not already formed as 'species' (or something codified). This explains the reason why Aquinas himself articulates it as a habit (a disposition towards perfection) and not as an eidetic content.

Consequently, Gilson expounds that participation establishes simultaneously the link that unites the creature with the Creator in which the Creator renders intelligible his creation and the separation between them in order that they would not be confounded. Participation in God's act (Pure Act) signifies possessing a perfection that pre-exists in God without nullifying or diminishing the original perfection in God with the emergence of such perfection in the creature.[336] In view of this, Aquinas submits that it is necessary that the consequent nature be like the preceding according to the lower nature of the human composition.[337]

The highly intuitive and resourceful import of this Thomistic design underscores not just the two theoretical and practical terms, but it also guarantees that the human mind is 'naturally' inclined to discover, understand, be in, and be perfected in the 'truth' through the *intellectus principiorum* in the speculative and the *scintilla rationis* (synderesis) in the practical order. The two aspects balance the Angelic Doctor's view on human nature in its limited capacities. This is to say that it is not enough to know the truth naturally through the principles, but it is also natural to the normal human person to have the regular promptings that direct the conscience towards the good in befitting acts. Moreover, the Angelic Doctor shows that 'nature' provides for the human insufficiency through the *habitus principiorum*.

intellectus principiorum primorum, quae statim cognitioni se offerunt." See also L. D'Izzalini, *Il principio intellettivo*, 97–98.

335 See R. Pasnau, *Thomas Aquinas on Human Nature*, 307.

336 See É. Gilson, *La filosofia nel Medioevo: dalle origini patristiche alla fine del XIV secolo* (Firenze: Sansoni, 2005), 610.

337 See *In II Sent*, d. 39, q. 3, a. 1: "Oportet quod consequens praecedenti similetur, nec hoc potest esse nisi secundum quod aliquid participat de perfectione ejus; quod quidem inferiori modo est in secundo ordine creaturarum quam in primo; unde hoc quod inferior creatura de similitudine superioris participat, est supremum in inferiori et ultimum in superiori."



### *b. Non-Existence of Innate Species*

From the preceding, there is pronounced evidence in Aquinas' submission of the innatist view. The corporal limitations of the human nature notwithstanding, we can ascertain a direct indication to the innatist idea found in analogical correspondence between the higher intellects and the human intellect. This implies that while truth belongs to divinity pre-eminently, it is given to the super-intellects i.e. angelic intellects to know the truth according to their species through analogous participation. Conversely, truth is attributed to the human intellect analogically through the *lumen* of *intellectus agens* by participation. The human intellect does not know through innate species, as the angels do, but by way of judgment, namely, the habit of the first principles. Thus, Aquinas suggests:

> Just as from the truth of the divine intellect there flow into the angelic intellects those intelligible species by which angels know all things, so does the truth of the first principles by which we judge everything proceed from the truth of the divine intellect as from its exemplary cause. Since we can judge by means of the truth of these first principles only in so far as this truth is a likeness of the first truth, we are said to judge everything according to the first truth.[338]

In this hypothesis, the divine *lumen* possesses truth and is truth himself but he shares this attribute accordingly in analogical equivalence with creatures starting from the higher intellects through the inferior. Through it, we perceive that the innate intelligible species in angels, which are close to optimal perfection, translates in the human person, into the natural truth of the principles (*veritas principiorum*).[339] The fundamental difference between them is that as a composite of matter and form, the human process of knowledge involves rationality and that is found in the 'prenotional' judgment of *habitus principiorum*. Therefore, the Angelic Doctor explicates this notion in other varied instances:

> Therefore, the relation of our intellect to those principles is similar to that which an angel has to all that he knows naturally. And since the knowledge we have of principles is the highest form of our knowledge, it is evident that on this summit of our nature we reach to some extent the lowest point of an angel's. … Consequently, just as we know principles

338 *De Ver*, q. 1, a. 4, ad 5: "Sicut enim a veritate intellectus divini effluunt in intellectum angelicum species rerum innatae, secundum quas omnia cognoscunt; ita a veritate intellectus divini procedit exemplariter in intellectum nostrum veritas primorum principiorum secundum quam de omnibus iudicamus. Et quia per eam iudicare non possemus nisi secundum quod est similitudo primae veritatis, ideo secundum primam veritatem dicimur de omnibus iudicare."

339 See *In IV Sent*, d. 49, q. 2, a. 7, ad 9; *ST*, I–II, q. 66, a. 5, ad 4; *De Ver*, q. 1, a. 4, ad 5; *In I APst*, lect. 20, n. 5; *In IV Metaph*, lect. 1; and *In De Trin*, q. 3, a. 1, ad 4.

by simple intuition without discourse, so do the angels know all they know in the same fashion. This is why they are called "intellectual," and why our habit of principles has the same name.[340]

### c. *Human Intellect's Original State of* Tabula Rasa

The preceding excerpt is a demonstration of the Thomistic postulation of 'innateness' in the human intellect juxtaposed with the angelic intellect. Likewise, as if to indicate the human inclination to matter and the essential import of the senses, Aquinas posits another enigma. He portrays the contrast between the human and the angelic intellects through the notion of the human mind as originally *tabula rasa*.[341] If human nature is so endowed with the knowledge of the first principles, why does the Angelic Doctor also claim that this same nature is *tabula rasa* from the outset? This evidences a vivid dilemma. Does Aquinas emerge here as vacillating between the notion of the human mind's *tabula rasa* and *scriptum* at the beginning? Could he be playing on words or seeming to accept that which he definitively negates? We can examine this assumption still more closely. Apparently Aquinas pre-empts this problem and justifies his position by another assertion:

> The human understanding, in the beginning, is "like a tablet, on which nothing is written," but, later, acquires knowledge through the senses by virtue of the agent intellect. Thus, the beginning of natural human knowledge is, indeed, to be in potency to all things knowable, but to know from the beginning only those things which are known immediately through the light of the agent intellect, that is to say, universal first principles.[342]

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340 *De Ver*, q. 8, a. 15: "Sicut intellectus noster se habet ad ista principia, sic se habet Angelus ad omnia quae naturaliter cognoscit. Et cum cognitio principiorum in nobis sit altissimum nostrae scientiae, patet quod in supremo nostrae naturae attingimus quodammodo infimum naturae angelicae. … Unde sicut nos sine discursu principia cognoscimus simplici intuitu, ita et Angeli omnia quae cognoscunt; unde et intellectuales dicuntur; et habitus principiorum in nobis dicitur intellectus."

341 See *De Ver*, q. 8, a. 9: "Intellectus noster comparatur tabulae in qua nihil est scriptum; intellectus autem Angeli tabulae depictae, vel speculo, in quo rerum rationes resplendent."

342 *De Ver*, q. 18, a. 7: "Intellectus humanus in sui principio est sicut tabula in qua nihil est scriptum, sed postmodum in eo scientia per sensus acquiritur virtute intellectus agentis. Sic igitur principium naturalis humanae cognitionis est esse quidem in potentia ad omnia cognoscibilia, non habere autem a principio notitiam nisi eorum quae statim per lumen intellectus agentis cognoscuntur, sicut sunt prima principia universalia." See also L. D'Izzalini, *Il principio intellettivo*, 101. In view of Aquinas' assumption D'Izzalini writes: "Anche in possesso di questo duplice principio attivo, immanente in noi, l'anima, nel *De veritate*, è sempre la «tabula rasa», sulla quale niente è scritto, non però come la tavoletta pronta per essere impressa, piuttosto come la lastra fotografica, che aspetta l'azione esterna dello sviluppo per esprimere



The above Thomistic simultaneous presentation of the senses and the agent intellect's action does not seem to resolve the enigma. Rather, it seems to have added to the puzzle through the problems of the *nihil* (for *tabula rasa*) and *nisi* (for *habitus principiorum*) at the same beginning. The competence of Aquinas is hereby portrayed because without contradicting his premise, he concludes with the authentic human intellect's nature. Nonetheless, we forestalled this part of the question through our prior exposition on the participatory nature of the human intellect and the human mode of understanding.

However, another feature still to be reconciled is the dual concepts of the *intellectus agens* in *habitus principiorum* and the senses. To this we comprehend from the Thomistic submission that although 'nothing' is written on the intellect except through immediate subsequent sensible experiences, the *lumen*, our intellect, participates in the likeness of divine *lumen* and enlightens the potential disposition, *habitus principiorum* (which are not codes 'in themselves'). Thus, Aquinas appositely affirms that "the intellect by which the soul understands has no innate species, but is at first in potentiality to all such species."[343] In another instance, he submits that, "the intellectual soul is indeed actually immaterial, but it is in potentiality to determinate species."[344] This further implies, as Percivale suggests, that the human process of cognition is in osmosis through the efficiency of the principles.[345] The whole dynamism may appear cyclic, but it depicts the artful approach in which the Angelic Doctor describes the natural progression of the metaphysical phenomenon of participation. Hence, the intellect is self-perfective according to the Angelic Doctor, with the exception of the other aspect outside our scope of inquiry in this research, that is, the action of grace.

### d. *Brief Assessment*

Finally, we establish that in this subtle Thomistic submission is an apt blend of the material aspect of the human person with the immaterial cognitive part without Aquinas falling into the danger of dualism or monism. As a result of his originality, Aquinas further escapes the trap of an *a priori* or *a posteriori* knowledge through his theory of participation. This participatory notion in its totality is one so transcending the human nature, that Cardona expounds that metaphysically

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il suo contenuto. Bisogna fare attenzione a non lasciarsi ingannare da una terminologia, che l'Angelico spesso adopera, cosi come la trova. L'intelletto … è privo di ogni determinato contenuto intellettivo, non possiede cioè nessuna idea che lo ponga in atto di conoscenza; ma se l'intelletto non possedesse in se il potere di astrazione della specie intelligibile, il fantasma non potrebbe evidentemente essere mai in grado di determinare l'atto intellettivo." *Ibid*, 101.

343 *ST*, I, q. 84, a. 3: "Intellectus, quo anima intelligit, non habet aliquas species naturaliter inditas, sed est in principio in potentia ad huiusmodi species omnes.

344 *ST*, I, q. 79, a. 4, ad 4: "Anima intellectiva est quidem actu immaterialis, sed est in potentia ad determinatas species rerum."

345 See F. Percivale, *Da Tommaso a Rosmini*, 40.

man is situated in the totality as a part of the participated being. Nevertheless, as a part that reassumes in itself this 'participated totality' and, in a certain sense overcomes it, he transcends it and arrives at the font, knowing in some way the separated All (God). In this way, he supersedes his own position and remains in the totality despite all.[346] Even for its being of a universal character, human cognition is limited and transitory, and so needs something more permanent to explicate the immaterial durable aspect.

Accordingly, Aquinas presents the natural light bearer in the cognitive faculty, namely, the *intellectus agens*, without the negative import of 'innatism' and 'illuminism'. From our considerations, it is obvious that Aquinas does not do away with the Augustinian doctrine of illumination, as some may think. Instead Aquinas accommodates and redirects it. Aquinas perceives an important ingredient in Augustine's illumination theory, and he preserves it. Instead of a regular dependence of the human mind on God's illumination, he proposes a sort of once-for-all illumination, the agent intellect. Caught in a dilemma of induction and deduction, Aquinas creatively posits neither. Moreover, the Angelic Doctor does not bring God into filling the gap of the lack in the human process of cognition. Rather, he blends the sensible data with the unconscious cognitive habitual aspect (*habitus principiorum*) wherein the sensible information finds a base. He further assumes the capable action of the agent intellect through the influx of its participation in the divine intellect. Hence, we assert that, although there are innate principles in Aquinas (but never innate ideas), his doctrine is not identical with 'innatism'. Consequently, we desist from the use of the term, 'innatism', as Percivale did, for the qualification of Aquinas' assumptions. We will rather suggest the 'innatist views' in Aquinas' cognitive theory in philosophy.

## D. Conclusion

In conclusion, since our inquiry in this chapter is principally to ascertain the habitual modes of the first principles, we began with the general notion of habits as a human phenomenon. We made a fairly extensive analysis of the realistic Aristotelian/Thomistic views on habits. To properly launch into our main argument, we dwelt a bit more on the intellectual habits, their implications and modalities of operation. We discovered within our discourse that the habits are interrelated and are not purely acts or pure potencies. Among others, we appreciated that habits make the person and/or model the totality of an individual's character and

346 See C. Cardona, "La situazione metafisica dell'uomo: (Approssimazione alla Teologia)," in *Divus Thomas* LXXV (1972), 30–55, 51.



disposition. Habits are qualities that dispose one towards the good or negative acts. They have, therefore, a permanent character. In the course of our search, we accentuated that when habits are good they can be qualified as virtues. Hence, we itemised the five intellectual and moral virtues; namely, *intellectus*, *scientia*, and *sapientia* for speculative knowledge and *prudentia* and *ars* for the practical knowledge.

The brief explications on these virtues grounded our main investigation, i.e. the study of *habitus primorum principiorum*. Considering the subtle nature of the survey, we began with the justification of the actual existence of *habitus principiorum primorum* and their collective responsibility of operation. Since the first and primordial articulation of this habitus is *intellectus principiorum*, we examined its import into the human mental system. With its natural interactive trait, *intellectus principiorum* is endowed with an enormous capacity of all comprehension. It penetrates all reality. Further, this *habitus* discovers *ens* in its primitive nature and processes. *Intellectus principiorum* is *primus inter pares* in knowing reality, as it exists; in fact, it is second to none in its ability to access truth, first, unconsciously and intuitively (pre-conceptually, implicitly). As an immaterial *habitus*, it has access also into the immaterial reality. We realised that it is the aspect of the functionality of the intellect that Aquinas equates with the angelic mode of knowing. Over and above, we discovered that *intellectus principiorum* is the *scientia* of *scientiae*. For this reason its object is *ens, et ea quae sunt per se entis inquantum huiusmodi*. Because of its absolute capacity to grasp knowledge and certitude in cognition, Aquinas affirms that "*nullum aliud genus cognitionis quam intellectus, est certius scientia*."[347] And so, in Aquinas, *intellectus principiorum* is the peak of apprehension of *ens* and all its attributes in reality.

In the same vein, we saw that the PNC is an immediate expression of *intellectus principiorum*. The PNC is not like the Kantian common but negative condition for all truth, and it is not restricted only to logic. The PNC objectively is an extensive all-inclusive judgmental notion regarding every reality, unlike Kant's theory. Besides, we acknowledged the notion of the PNC as the underlying judgment for all verity concerning our knowledge. We also appreciated that the PNC's formulation of being and non-being gives it primary precedence over every other existent principle and that contributes to its being the main paradigm of the articulation of the *intellectus principiorum*. Thus, the PNC is not simply a judgment but the pre-judgmental judgment that enables every other judgment. The PNC is the intellect's true nature in expression. From this, we confronted a long-standing debate on the PNC. We considered the implication of the *ens* and *non-ens* contained in the PNC. We concluded that the opposition of *ens* and *non-ens*, as understood by Aquinas, is real, stemming from our intellectual knowledge applied to experience.

347 *In II APst*, lect. 20, n. 15.

We examined the practical counterpart of the PNC which is synderesis. Although Aquinas' notion of synderesis is taken from the tradition, he gives synderesis its actual place in realistic philosophy. This implies that Aquinas aptly blends the Neo-Platonic nuance of the philosophy of Plotinus with the Aristotelian practical reason in ethics. In this issue, Aquinas presents a *recta ratio* as the main ethical inquiry that carries the notion of synderesis. Synderesis is the basis for the understanding of every other principle in the practical order. The meaning of life is to act for an end, and the just end is the good. This good can be related back to the ultimate good (*Sapientia*). Synderesis is the underlying principle that equips conscience with its acts. Synderesis, thus, is an epitome of *ratio*, since Aquinas equates it to *scintilla rationis* (the spark of reason) and to *ratio naturalis* (true natural reasoning). Moreover, it also 'remurmurs' against the wrong and has an infallible and enduring quality.

In our inquiry into the problem of innatism, we appreciated the apt input of Aquinas in the cognitive theory with his proposal of the *habitus principiorum* and *intellectus agens*. We found that although Aquinas has elements of innatist views in his assumptions, he was careful to maintain his position of the human intellect's original *tabula rasa* at birth. Its innate character does not entail the possession of innate ideas. The first *habitus* is a natural pre-disposition, which is actualised, though implicitly, to the extent that sensible knowledge is activated. It is the implicit intellectual knowledge present in every conscious human act.

Subsequently we shall examine the import of the principles as regards their indirect demonstration. The attempt is expected to enhance our appreciation of the Thomistic concept of the first principles.

# Chapter 5
# Evidence and Indirect Demonstration of the First Principles

Through our inquiry in the previous chapter, we came to the acknowledgement that the first principles in the realistic context are able to function efficiently because of their habits. In order to establish this, we began with a brief survey of the source and character of the human cognitive *habitus*. In the aforementioned investigation, we accentuated that nature is the grounding in which *habitus* inheres. In other words, *habitus* is a second nature. We also saw that *habitus* is perfective of this nature, namely, the faculty or the entity which is its abode. Essentially, we highlighted that *habitus* is neither the power *per se* nor the faculty but an indispensable dynamic quality of the very entity. Thereon, we examined briefly the general taxonomies of *habitus*. Thereafter, we methodically launched into the core of our analysis, the *habitus principiorum*. We established twofold features in the *habitus principiorum*, the theoretical and the practical, which are *intellectus principiorum* and 'synderesis', respectively. Although our interest is mainly in the speculative aspect, we equally examined the practical component in order to have a more comprehensive appreciation of the argument.

We saw further that *intellectus principiorum* is the *principium activum* of the human mind. Through this premise, we acknowledged that *intellectus principiorum* is the very attribute of the intellect, which is likened to the mode of operation of the angelic order in our Chapter Three. Accordingly, we appreciated that the direct object of *intellectus principiorum* is *ens, et ea quae sunt per se entis inquantum huiusmodi*, precisely, *ens* and its ontological attributes. Without *intellectus principiorum*, no knowledge as such is possible for the human understanding. *Intellectus principiorum* is the *scientia totaliter* in which the PNC is expressed as the one and essential paradigm. Within the same spectrum is our articulation that the PNC is the principle that captures the meaning of reality and is concurrent at the level of the grasp of *ens* in the primitive judgment. We further appreciated that the PNC as a *habitus primorum principiorum* is always present in the judgment of any reality by the normal human mind. In other words, to think or judge as a human person is to judge through the PNC. Hence, all our judgments as human beings presuppose the PNC. The study was aimed at clarifying some burning issues on the said principle. Although the problem persists, we established that the PNC in the realistic order (irrespective of its proponent) is the mind's basic natural pattern.

Likewise, we accentuated the nature and the role of the practical feature of the paradigm of principles, the synderesis. In this survey, we discovered that, though Aquinas did not invent the notion, he elevated synderesis to its real status as the *scintilla rationis*. This implies that synderesis is the understanding of the practical principles that always prompts the human mind to the understanding of the necessary end, i.e. the good. We underscored that it is a spark of reason that is not equated with ordinary reason and is not identical with conscience and prudence. On the other hand, synderesis supplies conscience with its act. We also ascertained that synderesis as well as the PNC are indestructible and infallible as *habitus primorum principiorum* because of the light of the *intellectus agens* that equips their habitual understanding of the principles.

Consequently, through our synoptic analysis on *intellectus agens*, we launched into the investigation of the notion of 'innatism' in Aquinas. In this inquiry, we discovered that, in the Thomistic metaphysics, *intellectus agens* as *lumen* is connected with the idea of human participation in the divine. We appreciated Aquinas' diverse finesse in the employment of Augustine's theory of illumination. We saw that the Angelic Doctor related the *intellectus agens* to the angelic operation through the latter's knowledge of the species. Aquinas perceptively posited the concept of the human mind's *tabula rasa* at birth without infringing on his proposal of *habitus primorum principiorum* with the light of *intellectus agens*. He unified the two aspects of the human composition, the material and the spiritual, in a holistic thesis of the *lumen, habitus principiorum* and *sensibilia*. Finally, we recognised that even though Aquinas has much to do with innate principles, he does not hypothesise a doctrine of 'innatism' or of induction.

In this chapter, our aim is the illustration of indirect proof for the first principles in Aquinas. We aspire to demystify the ambiguity about the need for such endeavour since the first principles are indemonstrable. We hope to examine the possibility of proving the first principles *per absurdum*. In other words, since the first principles are first presuppositions (postulations), it is not possible to demonstrate them through recourse to something epistemically precedent. Nevertheless, they can be illustrated through examples and clarifications. We can especially demonstrate that their negation leads to absurd consequences. In order to realise this objective, we will begin with a few Thomistic illustrations of the indirect demonstration of the first principles. We shall show examples from a few other interpretations. Thereon, we hope to explore the Thomistic accent to the first principles as *per se nota*. This will lead us to the discourse on the *per se* propositions and truth. We shall also succinctly examine the subtleties as in the notion of the first principles as *per se nota*.

The *per se nota* will introduce us into the study of the relationship of truth, intelligibility, and the *per se nota*. Since truth and intelligibility are substantially of the intellect, because of the principles and their offshoot in knowledge, we shall investigate how the mind judges by way of analysis and composition. This is expected to facilitate the notion of the intellect's generation of the sciences through rationality as the main function of an actual intellect. Because of its crucial import in the philosophy of Aquinas, we hope to survey the intellect's best scientific *resolutio*. This will lead us into *sapientia*, the intellect's highest judgment at all levels.



Finally, we shall examine the import of this *intellectus resolutio* to *sapientia*. This will bring us to the two principal aspects of the first principles, specifically the speculative and the practical spheres. Within this inquiry, we shall attempt to briefly study the 'wisdom' embedded in the entire research in either the speculative or the practical fields. On this note, we hope to conclude our analyses.

## A. Indirect Demonstration of the First Principles

Through our preceding chapters we discovered and affirmed that Aquinas, akin to Aristotle, confirms that there are no formal proofs for the first principles. Thus, our attempt in this section is not to contradict our established verdict; it is, on the contrary, a plan towards solidifying our claims. In one of our considerations in our First Chapter, we ascertained through Aristotle's submissions that the first principles are provable only through *reductio ad absurdum*. Moreover, we established that a venture of proof for the first principles rebounds as begging the question (*petitio principii*).[1] The intended demonstration is already the basis of the content of the affirmation.[2] For this reason, Berti appositely suggests that through this explanation, Aristotle admits that the refutation of the 'other' amounts to a demonstration of the principle. It is a real 'dialectical demonstration'.[3] But how can we define this peculiar kind of demonstration? Following this, Berti describes a demonstration *ad absurdum* as a particular circumstance of demonstration that is a scientific syllogism. It is not necessary here to recall the entire Aristotelian theory of the syllogism, which constitutes another of Aristotle's renowned illustrations of theorising. The usual procedure was already widely used by a previous philosophy, but before Aristotle it never actually led to such

1 See *Met*, IV, 1006b 15–26.
2 For further reading on this, see our considerations in Chapter One of this work under the sub-titles: *The Possibility of the Knowledge and Elusiveness of the First Principles in Aristotle* and *The PNC as Case Study*.
3 See E. Berti, *Contraddizione e dialettica negli antichi e nei moderni* (Palermo: L'Epos, 1987), 112.

a level of critical awareness.[4] Hence, according to Aristotle, the demonstration *ad absurdum* is a syllogism, which assumes, in place of one of the two premises, the contradiction of what we want to prove, and that infers a conclusion judged as false as opposed to something that is manifestly true.[5] In view of the above, our attempt here is to use some instances to clarify the indemonstrable nature of the first realistic principles.

### A.1.1 *Sample Thomistic Texts on Indirect Demonstration*

As we discovered through our previous inquiries, one can suggest that to be human is to think, to think is to judge, and to make an existential judgment is to employ inherent definite principles in order to acquire knowledge of reality as it is. This is to say that for one to know anything, the first principles are always used as the foundation. The principles are used for their own proof by contradiction *ad absurdum*. The reason is that they are fundamental to the human modality of knowledge because any human knowledge builds upon the originally known. Since we touched on these facts in our Chapter Three, we shall not return to them here; it is enough that we recall the essentials. Knowledge of the subsequent flows from the definite (the first principles) and, as we cannot continue on an infinite regress in the circle of known facts, the first principles substantially pivot all human knowledge so that there is no vicious circle.

In Aquinas, we see very little of the indirect demonstration. Rather, he assumes the Aristotelian hypotheses. On the other hand, Aquinas pays more attention to the *per se* and the principles as *per se nota*. The reason might be that in his epoch he may not have considered the indirect demonstration to be so crucial, since the first principles could easily be assumed without much controversy. Nonetheless, in every doubt about the first principles, there can be a kind of demonstration.

Through one of his commentaries on the *Aristotelian Metaphysics*, the Angelic Doctor illustrates that any normal rational human being exercises his/her personhood through a necessarily true definite judgment, namely, the first principles exemplified in the PNC. To demonstrate that the first principles of demonstration are provable only *ad absurdum*, Aquinas, like Aristotle, begins by showing the futility and impossibility of engaging in a dispute or dialogue with one who contradicts affirmations or any definite conceptions. According to him, in line with one of the texts, "such a man will not affirm or assert anything;" or "he cannot assert or affirm anything of this kind."[6] In non-assertion and simultaneous negation and affirmation, the person is equally denying or affirming every other thing (reality). As Aquinas explains:

4 See E. Berti, *Contraddizione e dialettica*, 118.

5 See *APr*, 61a 18–25.

6 *In IV Metaph*, lect. 9: "Talis homo non asserit aliquid nec affirmat." "Nec asserere nec dicere aliquid huiusmodi est."



> If this man takes nothing to be definitely true, and similarly thinks and does not think, just as he similarly affirms and denies something in speech, he seems to differ in no way from plants; because even brute animals have certain definite conceptions. Another text reads, "from those disposed by nature," and this means that such a one who admits nothing does not differ in what he is actually thinking from those who are naturally disposed to think but are not yet actually thinking. For those who are naturally disposed to think about any question do not affirm either part of it, and similarly neither do the others.[7]

Thus, Aquinas confirms through the foregoing the necessity, the essential nature, and the vital import of the first principles. As definite conceptions of the mind with truth-value, unless one is not yet thinking, he cannot elude them. The denial of the first principles equates one to a plant whose existence is simply to live without judgments. On the contrary, if one chooses to refute them, he invariably falls into only verbal denial because they necessarily accompany his/her judgments in the thought process. Besides, everyone thinks or is naturally disposed to think. Therefore, whether in suspense or in actual utility, the human judgments through thoughts are demonstrated by the 'definite', explicitly, the first principles.

Aquinas continues in the hypothesis that there is no existential situation which could conclude with an affirmation or negation simultaneously. It is either an affirmation at a specific moment or a negation. If negation and affirmation were the same, there would not be need for any comparison whether from the metaphysical, existential, mathematical or even dialectical viewpoint. Aquinas justifies this by the illustration that if to go home were the same as not to go home, there would be no need for going home. Then, one can choose to stay at any place because there is no difference between being outside and being at home. In like manner, we say that if to rest is the same as to work, people will continually work day and night without stop and there would not be any need for having some rest and sleep. Hence, an explicit contradiction cannot be thought.[8] Using another example, the Angelic Doctor demonstrates that the normal rational judgmental

7 *In IV Metaph*, lect. 9: "Et si ipse sicut similiter affirmat et negat exterius, ita et similiter interius opinatur et non opinatur, et nihil suscipit quasi determinate verum, in nullo videtur differre a plantis; quia etiam bruta animalia habent determinatas conceptiones. Alius textus habet ab aptis natis: et est sensus, quia talis, qui nihil suscipit, nihil differt in hoc quod actu cogitat ab illis, qui apti nati sunt cogitare, et nondum cogitat actu; qui enim apti nati sunt cogitare de aliqua quaestione, neutram partem asserunt, et similiter nec isti."

8 See *In IV Metaph*, lect. 9: "Manifestum est quod nullus homo sic disponitur ut credat affirmationem et negationem simul verificari; nec illi qui hanc positionem ponunt, nec etiam alii. Si enim idem esset ire domum et non ire, quare aliquis iret domum et non quiesceret, si putaret quod hoc ipsum quiescere, esset ire domum? Patet ergo, ex quo aliquis vadit et non quiescit, quod aliud putat esse ire et non ire."

process of the human person through the first principles recognises a difference between right and wrong, good and bad, self preservation (safety) and danger. Subsequently, he writes:

> If someone walks along a path which happens to lead directly to a well or a brook, he does not proceed straight along that path but seems to fear that he will fall into the well or brook. This happens because he judges that to fall into a well or a brook is not equally good and not good, but he judges absolutely that it is not good. However, if he were to judge that it is both good and not good, he would not avoid the above act any more than he would desire it. Therefore, since he avoids doing this and does not desire it, obviously he judges or thinks that the one course is better, namely, not to fall into the well, because he knows that it is better.[9]

Aquinas, therefore, affirms that even the human appetitive desires flow from the truth-value judgment based on the PNC. This implies that the basic judgment always leads to the desired end, the good. It is evident from the preceding Thomistic text that the judgment 'is made' because the judgment is already 'known' as an underlying principle. This is to say that it is habitual in man 'to know' this judgment, that 'A' is not 'non-A'. This judgment manifests itself in the choices of individual persons. Aquinas further clarifies that no normal rational human being could think to apply the good and the not-good at the same time and in the same situation. There is always a judgmental-based choice that instigates man unconsciously to choose the better out of two contradictory conditions. There is never a realistic situation where the human person chooses both conditions simultaneously. And so, man is naturally made to face judgmental choices. In view of this the Angelic Doctor submits:

> This is evident from the fact that he does not seek all things to the same degree or make the same judgment about them ... And from this difference in opinion it follows that he definitely desires the one and not the other; for he would have to desire both equally, i.e., both the sweet and the not-sweet, and both man and not-man, if he thought that contradictories were the same. But ... there is no one who does not seem to avoid the one and not the other. So by the very fact that a man is differently disposed to various things inasmuch as he avoids some and desires others, he must not think that the same thing both is and is not.[10]

9 *In IV Metaph*, lect. 9.

10 *In IV Metaph*, lect. 9: "Quod ex hoc patet, quia non omnia aequaliter quaerit et opinatur ... Et ex ista diversa opinione sequitur quod determinate quaerit unum et non aliud. Oporteret siquidem quod similiter utraque quaereret, scilicet dulce et non dulce, hominem et non hominem, si existimaret quod essent eadem contradictoria. Sed ... quod homo afficitur diversimode ad diversa, dum quaedam timet et quaedam desiderat, oportet quod non existimet idem esse quodlibet et non esse."



From the preceding, it is obvious that the basic rational human judgment attunes the mind to the truth of reality. The further implication is that no one with the correct mind negates a realistic affirmation or affirms a realistic negation, unless it is only on verbal grounds. In this way, every normal human person obeys and acts absolutely according to the mind's truth-value judgment. The most we can do and have done is not to discover a scientific demonstration for these first principles, since we can find none; the mind simply adapts to them as 'absolutes'. In this instance is clearly seen the adequacy of the Thomistic conception of truth as *adaequatio intellectus et rei*, because the mind does nothing but adapt to the 'truth' which is achieved through the judgment-based alternative.

Consequently, using the above Aristotelian opinions as premises, Aquinas substantiates that:

> It is evident, then, that all men think that truth consists in affirmation alone or in negation alone and not in both at the same time. And if this does not apply in all cases, at least it applies in things concerning good and bad, or in better and worse. For from this difference accounts for the fact that some things are desired and others are feared.[11]

Aquinas shows the flaws of those who seek justification for everything. Aquinas illustrates also that the first principles operate in a sane and conscious mind, and not in an unconscious situation. Decisions made in the state of consciousness and those made while asleep or quasi-unconscious states are not equivalent. For one is not fully sensible in the state of sleep and cannot claim responsibility or cannot be held responsible for any act of judgment in that state. Hence, Aquinas gives evidence to the folly of the Sophists in their misdirected and misguided quests. According to Aquinas, through their quests, the Sophists sell off their inmost mind to be the opposite of the knowledge they seek, namely, demonstration for all things. Thus, the Angelic Doctor writes:

> But these doubts are foolish, for they are similar to the doubt whether we are now asleep or awake; for the distinction between all of these is not essential. Yet all of the foregoing doubts amount to the same thing since they have a common root. For these sophists desire that demonstrative arguments should be given for all things ... And they were not content to know this rule in just any way at all but wanted to acquire it

11 *In IV Metaph*, lect. 9: "Sic ergo patet quod omnes opinantur se habere veritatem vel in affirmativa tantum, vel in negativa, et non utraque simul. Et si non in omnibus, saltem in bonis et malis, vel in melioribus et in deterioribus. Ex hac enim differentia provenit quod quaedam quaeruntur et quaedam timentur." [Trans mine].

> by demonstration. That these men were in error, then, becomes evident from their actions, according to what has been said. And from these considerations it appears that their position is false; for if the judgments of one who is asleep and of one who is awake were equally good, then the same thing would result from each judgment when men act. But this is clearly false. … For although these men maintain this view and raise such questions, still they are not deceived in their own mind so that they believe the judgment of one who is asleep and the judgment of one who is awake to be equally true. And this is clear from their actions, as has been pointed out.[12]

Consequently, the Angelic Doctor certifies that it is a weakness of mind on the part of anybody who seeks demonstration for things for which there is no demonstration, such as, the first principles, even 'existential' circumstances as the certainty of being awake. The first principles are 'demonstrated' when one negates them and, conversely, whoever negates them, indirectly 'presupposes' them as principles, because they cannot be refuted. As Aquinas establishes:

> 'the starting point of demonstration is not demonstration'; i.e., there can be no demonstration of it. … Because this too is not difficult to grasp by demonstration; for a demonstrative argument proves that not all things can be demonstrated, otherwise there would be an infinite regress.[13]

### *A.1.2 Some Interpretations on the Indirect Proof of the First Principles*

Following the intrinsic nature of the first principles' indemonstrability, some philosophers have interpreted the indirect demonstrations in various terms. Let us survey a few of these interpretations.

12 *In IV Metaph*, lect. 15: "Sed istae dubitationes stultae sunt. Similes enim sunt illi dubitationi, qua dubitatur, utrum nunc dormiamus, an vigilemus. Horum enim omnium distinctio per se non est. Omnes autem dubitationes praedictae idem valent, quia ex eadem radice procedunt. Volunt enim isti sophistae quod omnium possent accipi rationes demonstrativae. … Nec erant contenti istam regulam qualitercumque scire, sed eam volebant per demonstrationem accipere. Ergo quod ipsi decepti sunt, manifestum est in eorum actibus secundum quod diximus. Ex quibus apparet quod positio eorum sit falsa. Nam si aequaliter efficax esset iudicium dormientis et vigilantis, eadem sequerentur in actibus hominum ex utroque iudicio; quod patet esse falsum. … Ipsi enim licet hoc ponant et oretenus quaerant, non tamen mente in hoc decipiuntur quod credant similiter esse verum iudicium dormientis et vigilantis; quod ex eorum actibus patet, ut dictum est." [Trans mine].

13 *In IV Metaph*, lect. 15: "Principium demonstrationis non est demonstratio, idest de eo demonstratio esse non potest. …, quia non est hoc difficile sumere etiam per demonstrationem. Ratio enim demonstrativa probat quod non omnia demonstrari possunt, quia sic esset abire in infinitum."



### *a. Berti's Dialectical Method*

According to Berti, the dialectical method is the proper philosophical method starting from the Socratic period expressed in Plato. Fundamentally, through dialectic Plato perfected the Socratic dialogues. Berti proposes that Socrates had already identified in the refutation (*èlenchos*), in reduction to contradiction, a way to show the falsity of a thesis. He employed the art of correct discussion without the Sophistic malevolence. It entails through Socrates the reduction to contradiction, the procedure of demonstrating the falsity of a thesis by the implicit presupposition of the PNC or the conviction that a contradiction cannot exist in reality.[14]

Plato integrated the proceeding through the Socratic discovery that "the science of opposites is the same", which means that the knowledge of the falsity of a thesis is equivalent to knowing the verity opposed to it as a contradictory. In the popular interpretation of Parmenides, it is assumed that the dialectic is not only to deduce the consequences of a hypothesis, to ascertain if they lead to contradiction, but also in the deduction of the consequences of the hypothesis opposed to it as contradictory. Parmenides recommended this because he believed that, in the circumstance whereby two mutually contradictory theses are involved, and one admits to be reduced to contradiction while the other ordinarily resists such a reduction, it is not doubtful that the first is false and the second is true. Thus, this procedure, in which the principle of the excluded middle is implicitly assumed, allows for the dialectic to become *epistêmê*, which implies scientific knowledge.[15]

Berti interprets that dialectic is the process most appropriate to philosophy, since it is a dialogue between persons, so that they are personally involved. It does not leave anyone indifferent, but it enhances life itself by bringing into question conducts, and the life of each of the parties involved. Both parties enter directly into the 'totality' of which the meaning is sought. For these facts, dialectic is also suitable for philosophy since it is rational and, precisely, equated to a rational examination.[16]

Dialectic most importantly is philosophical because it is the only way to argue the consistency of the first principles. Examples of such principles are the PNC and the principle of the excluded middle. As a result, in dialectic, these first principles are not employed as premises for deductions, but as tools for refutation and demonstration *ad absurdum*, in other words, within an 'indirect' demonstration.[17] Berti establishes:

14 See E. Berti, *Le vie della ragione* (Bologna: Il Mulino, 1987), 140.
15 See E. Berti, *Le vie della ragione*, 140–141.
16 See E. Berti, *Le vie della ragione*, 141.
17 See E. Berti, *Le vie della ragione*, 141–142.

> A further improvement of the Socratic-Platonic dialectic has been had with Aristotle, who founded dialectically the same common principles, through the dialectical method also, that is, the well-known «elenctic demonstration» (*apodèixai elenktikòs*) exposed in the fourth book of *Metaphysics*, which is undoubtedly dialectic, because it requires a comparison between two opposing views, precisely between the principles involved and their negation. Besides, it would not have been possible to establish such principles in another way, since they, being the principles of all, could not be deduced from anything. Once again, therefore, the dialectic procedure reveals the only one appropriate to a discourse that has to do with 'all'.[18]

Berti corroborates that the proof by contradiction methodically uses contradiction twice. The first is when it detects the contradiction from the conclusion drawn from the denial of the thesis that will be proved and a premise recognised as true, which allows for the assertion of falsity of such a conclusion. The second is when it detects the contradiction between the false conclusion and the argument that will be demonstrated, which gives room for the conclusion of truth about the latter. This applies in both cases to the principle of excluded middle, as they have to do with the true and false.[19] Berti explains that, since the contrast between this conclusion and the claim that it will be demonstrated is a real contradiction, on the grounds that they are respectively the assertion and denial of an identical predicate about the same subject, within the same time and under one aspect, the demonstration entails that the falsity of one necessarily leads to the truth of the other by virtue of the principle of the excluded middle. In this circumstance, the principle of excluded middle proves to perform a real demonstration, albeit of an indirect type.[20]

In line with the preceding considerations, we affirm that the Thomistic notion of the first principles is demonstrable only with the indirect method, that is *reductio ad absurdum*. As the Thomistic development of the first principles is in accord with the Aristotelian principles, in the same vein, the demonstration of the first

18 E. Berti, *Le vie della ragione*, 142: "Un perfezionamento ulteriore della dialettica socratico-platonico si è avuto con Aristotele, il quale ha fondato dialetticamente gli stessi principi comuni, mediante un procedimento ugualmente dialettico, cioè la famosa «dimostrazione elenctica» (*apodèixai elenktikòs*) esposta nel IV libro della Metafisica, la quale è indubbiamente dialettica, perché richiede il confronto fra due tesi opposte, precisamente tra i principi in questione e la loro negazione. Del resto non sarebbe stato possibile fondare tali principi in altro modo, dato che essi, essendo principi di tutto, non potevano essere dedotti da nulla. Ancora una volta, dunque, il procedimento dialettico si rivela l'unico adeguato ad un discorso che abbia a che fare col «tutto»."

19 See E. Berti, *Contraddizione e dialettica*, 120.

20 See E. Berti, *Contraddizione e dialettica*, 118.



Thomistic principles follows after that of Aristotle's remodelling of the dialectic. As Aristotle suggests:

> For the study of the philosophical sciences it is useful, because the ability to puzzle on both sides of a subject will make us detect more easily the truth and error about the several points that arise. It has a further use in relation to the principles used in the several sciences. For it is impossible to discuss them at all from the principles proper to the particular science in hand, seeing that the principles are primitive in relation to everything else: it is through reputable opinions about them that these have to be discussed, and this task belongs properly, or most appropriately, to dialectic; for dialectic is a process of criticism wherein lies the path to the principles of all inquiries.[21]

Conclusively, Berti proposes that the restrictive judgments submitted by Aristotle by way of the dialectic according to which dialectic is not 'cognitive' (*gnoristikè*) but only investigative (*peirastikè*), hence, different from philosophy, should not constitute problems about considering it as the method of philosophy. Although, considered on its own, since it could be utilised by other forms of discourse, dialectic is not philosophy; however, that does not divest dialectic of its legitimacy in philosophy. Thus, when applied, as required, to alternatives as regards the entirety (all), to alternatives between two actual contradictory hypotheses, dialectic generates authentic knowledge. Besides, it is only in the holistic context, specifically in philosophy, that the complete alternatives can truly be given. Such are those between contradictory theses, in which the refutation of one is tantamount to the demonstration of another.[22] The demonstration according to the principle of excluded middle must be very accurate. There should be at play a real contradictory alternative (e.g. there is God or that there is no God). For instance, creation and evolution are not contradictory, since evolution can imply creation.

### *b. Livi's Interpretation with the PNC*

The foregoing discourse on dialectical demonstration ushers us into another similar consideration by Livi using the PNC as exemplar. Aquinas does not develop separate arguments on this theme. Since his major inclination in the hypotheses on the first principles is Aristotelian, we reiterate that what holds for the demonstration of the Aristotelian principles also holds for Aquinas. According to Livi, the Aristotelian development of the dialectic between first principles and science complies with the metaphysical approach already established by Parmenides,

21 *Top*, I, 1, 101a, 34–101b 4.

22 See E. Berti, *Le vie della ragione*, 142–143.

which identifies with 'being' and 'rationality'.[23] Also on the Parmenidean line is the substantial Aristotelian contribution for the improvement of the formulation of the PNC. In Aristotle's view, the PNC is the first, the firmest, and the best known. It is in Aristotelian understanding the most necessary to be known so that one is predisposed to apprehend any other reality, to combine the *logos* to *empeiria*.[24]

Livi fittingly asserts that there is a threefold formulation of this Aristotelian approach; namely, the axiomatic, pragmatic, and the dialectical. According to Livi, the PNC is universally normative in character; it determines all being, all thought, all verbal utterances. Nonetheless, some still deny it, either directly or indirectly. For this fact, there arises a need to justify principles dialectically. How then can one impose (dialectically) its incontrovertible character on such negations? Livi acknowledges that the PNC's imposition is not by way of a demonstration, for each demonstration supposes a principle to which it belongs, and thus this principle falls short of efficacy because, as a principle, it is negated as well. If one proceeds to establish a further principle, this continues, and so *ad infinitum*. The result will be that eventually there would be no demonstration at all. Conversely, on a positive note, this implies that one cannot demonstrate everything.[25]

Consequently, as part of this impossibility lies the Aristotelian discourse of what Livi regards as "the safest of all principles." For this reason, according to Aristotle, within a dialogue with its negator, the only means by which this principle can be reaffirmed is through dialectic (logic). This implies that it is the proof by way of rebuttal, which is an *elenchic* defence (*èlenchos*).[26] On this, Livi refers to Bontadini, who describes the confutation as the refutation of denial, which rebounds on the denier, immediately he says something. In order to be such, the denier needs to say something, for instance, to express the negation of the principle. The act in which the denier expresses a view, that is, enunciates the negation of the principle, instigates the refutation against him. This means that the refutation is 'within' the denial (self-confutation). Actually, if its negation will be a 'true' denial and wishes to remain a 'negation', it immediately becomes the 'affirmation' of the principle. Given that it is a true denial, its negation is not equivalent to affirmation, it is a denial, which is 'just denial'; hence, a negation that opposes affirmation, namely, a 'contradictory denial'. Thus, the principle has an absolute value, such that whoever denies it affirms it in the same process. This is to say, according to Bontadini, that in the very negation is contained its affirmation. In effect, the PNC is invincible.[27]

23 See A. Livi, *Il principio di coerenza: senso comune e logica epistemica* (Roma: A. Armando, 1997), 28.

24 See *Met*. IV, 1005b.

25 See A. Livi, *Il principio di coerenza*, 28–29.

26 See A. Livi, *Il principio di coerenza*, 29.

27 See A. Livi, *Il principio di coerenza*, 29.



Thus, Livi affirms that the outcome of this pragmatic refutation is reduction to silence. Molinaro[28] asserts in this sense:

> To deny the principle means to be reduced to not speaking to the situation of having to deny the word, but it is also the negation or cancellation of thinking, of the logical world. For the denial of the principle to apply, it is required that the denier accepts not to speak and not to think, as it were, it is necessary that he ceases to 'be' a man. The denier is self-destructive as in thinking and speaking consciousness: by denying the principle he/she thinks nothing, says nothing, does not even dialogue with himself/herself, because it is not possible to affirm and deny at the same time, to say and cancel (not to say) together, namely: it is not possible that to think and say something become identically to think and say not something or, that it is the same, whether not to think and not to speak: the end result is the elimination of thinking and of speaking, and the denier would be reduced in a similar way to a trunk. As a result the absolute validity of the principle and its absolute requirements concern the absolute unity of language and thought (logic) and, since thought is the same manifestation or presence of being, they concern the absolute unity of saying, of thinking and being: in this unity is the linguistic significance, logical and ontological of the principle.[29]

Livi fittingly suggests that there follows two important corollaries. Firstly, that the negation of the principle is the denial of the truth; that is to say, it is the foundation of truth. Consequently, truth is that rationality (non-contradiction) of discourse as a manifestation of being. The implication of this is that it is possible to establish the truth of any proposition, in the circumstance of inter-subjective disagreement

28 We cite Molinaro here to support Livi's argument because Livi uses him as a reference, since he found Molinaro's notion on this argument very persuasive.

29 A. Molinaro, *Metafisica: corso sistematico* (Cinisello Balsamo: San Paolo, 1994), 41–42: "Negare il principio significa ridursi a non parlare, alla situazione di dover negare la parola; ma è insieme la negazione o l'annullamento del pensare, del mondo logico. Perché la negazione del principio possa valere occorre che il negatore ammetta di non parlare e di non pensare, cioè occorre che cessi di essere uomo. Il negatore si autosopprime come coscienza pensante e parlante: negando il principio non pensa nulla, non dice nulla, non dialoga neppure con se stesso, perché non è possibile affermare e negare nel tempo stesso, dire e disdire insieme; vale a dire: non è possibile che pensare e dire qualcosa sia identicamente pensare e dire non qualcosa o, che è lo stesso, sia non pensare e non dire: l'esito terminale è l'annullamento del pensare e del dire, e il negatore si ridurrebbe così simile a un tronco. Per conseguenza l'assoluta validità del principio e la sua assoluta necessità concernono l'assoluta unità del linguaggio e del pensiero (la logica) e, dal momento che il pensiero è la stessa manifestazione o presenza dell'essere, concernono l'assoluta unità del dire, del pensare e dell'essere: in questa unità consiste il significato linguistico, logico e ontologico del principio."

(dialogue). By so doing, one demonstrates to the other party that he/she cannot (reasonably) deny such a proposition because of the contradictory nature of the opposing proposition. Truth, therefore, is guaranteed by the demonstration of inconsistency of the contradictory proposition. Secondly, every philosophy, any doctrinal position, is shown to be true to the extent that it succeeds in the invalidation of different contradictory positions, precisely, other philosophies. Ultimately Livi asserts that opinion is a teaching position without giving one the opportunity to rebut the other by the demonstration of the contradiction; conversely, truth is the doctrinal position that is imposed on its negations through the demonstration of the contradictory or logical inconsistency.[30] To support this view, Livi cites Reale's supposition on the *èlenchos* method of demonstrating the PNC. As Reale suggests:

> From the point of view of method this is, probably, the most significant discovery of ancient philosophy: the supreme inalienable truths are those which, at the very moment in which one denies them, he/she is forced to make surreptitious use of them in the act of denying them, and, therefore, reaffirms them just denying them. This is a true 'trap' that truths tend to from which man cannot escape.[31]

Affirmatively, Livi concludes that the classical metaphysical notions are more directly related to "the principle of coherency."

Now, Livi finds a very close relation of the principle with his most appreciated terms of 'common sense'. This implies that common sense is in itself incontrovertible. This certitude may be denied by some positions of philosophy (or other forms of scientific knowledge). However, that would only be temporary because the inherent contradiction of philosophy itself, sooner or later, will refute the negation, in order to restore the truth of common sense as a necessary (and not feasible) presupposition.[32]

According to Livi, the esteem of the classical thought towards common sense causes scepticism[33] to be successfully fought by philosophy expressed as 'science', through the use of the rational tools of epistemic logic. The latter re-evaluates the primary certitudes with regard to the secondary ones. For instance, Saint Augustine's controversy confronted sceptical thought with the claim of

30 See A. Livi, *Il principio di coerenza*, 30.

31 G. Reale e R. Radice, *Storia della filosofia antica*, Vol. I (Milano: Vita e Pensiero, 1989), 492–493: "Dal punto di vista del metodo è questa, probabilmente, la scoperta più cospicua della filosofia antica: le supreme verità irrinunciabili sono quelle che, nel momento stesso in cui uno le nega, è costretto a farne surrettizio uso nell'atto del negarle, e, dunque, le riafferma proprio negandole. È questo un vero «agguato» che tendono le verità alle quali l'uomo non può sfuggire."

32 See A. Livi, *Il principio di coerenza*, 30.

33 On the argument about scepticism and philosophy of common sense, see also V. Brochard, *Les sceptiques grecs* (Paris: J. Vrin, 1932), 413.



primary certainty about the world, of self, and of God, focusing on the intrinsic contradiction of the theoretical doubt on such certainties: hence, Augustine's declaration of *Si fallor, sum*.[34] Consequently, through this illustration, Livi shows that the PNC and other primary certainties (principles) are demonstrable indirectly through the common sense hypotheses.

### c. *Briefs on Sanguineti's Illustration on diverse Philosophical Positions*

In order to show the inevitable error of those who attempt to negate the first principles, Sanguineti on his part uses some schools of philosophy for his explanation. According to him, through empiricism and nominalism some negate the existence of universal principles. For such schools of thought, as we saw in Chapter One,[35] there are no universal principles in philosophy, in science, or in morality. However, empiricism tries to explain the thought process beginning from sense processing and, consequently, accepts the sense data as 'ultimate principles'. Hence, this is the inception of its flaw. For empiricism, the interpretation of principles of human knowledge is genetic, but to maintain this view is already a general principle (the principle according to which all principles are genetic).

There are varied forms of empiricism. Nonetheless, as Sanguineti observes, to the extent that each type claims to be a general theory about human knowledge, it falls back to the application of a universal explanation of our knowledge. Thus, even empiricism accepts a kind of universal principles, albeit not the foundational kind, but genetic, in the sense that principles are not innate, but that they arise from culture, experience, etc., and in this sense they are particular and relative.[36] This is to say that empiricism indirectly 'affirms' its negation of the first principles.

About other philosophical trends, especially in the postmodern structure, or 'weak thought', Sanguineti detects that they are contrary to the existence of universal principles. For such schools, people would not be guided by universal principles and even by special noetic principles. They aim at waiving any pretence of explanation, hesitate to ask why, and to talk about principles. In this sense, the search for principles is sometimes regarded as foundationalism. For these positions, there would not be 'fundamentals' and it would be misleading to search for such. Nevertheless, it would be necessary to explain why people act, think and speak as experience shows. Since such schools are classified by their plurality of beliefs and meaning about 'experience', 'explanation', 'reasons', and 'principles', their character is best articulated by what Sanguineti calls an "irreducible pluralism of paradigms."[37]

34 See A. Livi, *Il principio di coerenza*, 31.

35 For more on this argument, see our Chapter One under the subtitle: *Nominalism and Empiricism*.

36 See J. J. Sanguineti, *Introduzione alla gnoseologia*, 177–178.

37 See J. J. Sanguineti, *Introduzione alla gnoseologia*, 178.

Now a radical and deconstructionist position of postmodernism coincides with the ancient scepticism. However, the greatest of its errors is that therein lies a contradiction. Sanguineti rightly observes a strong indirect demonstration in this position. With the denial of every principle, while affirming a plurality irreducible to some units, there is already a principle and a quite strong principle to the extent that it can obstruct any activity or thought wishing to pursue a line deemed right. An instance of this group who advocate an anarchical (absolute) pluralism, without principles at all (as in the prohibition of assigning a universal meaning to words) means to adhere indirectly and strongly to their principles of embargo. Such absolute prohibitions assume dogmatic character and universality.[38] To propose that "there are no principles" is a very strong principle. Again, the best way to negate the principles, as Aristotle advised, would be silence.[39] The negation of the first principles here is manifested to be absolutely self-contradictory.

Sanguineti further explains that the principles in this second philosophical orientation, considered as non-intellectual, is consequential to scepticism about the principles. If then there are no principles, the principles are easily considered as pre-rational positions of social, traditional, biological, pragmatic or voluntary character. As such, moral maxims, like "we must respect others," and "it is necessary to abide by the laws," etc. would emerge as normal human behaviour, in the context of natural selection (an evolutionary naturalist explanation). It can also be adduced that the principles are conventional creations of human beings attributable to the desire for power. Were such the case, the affirmation of certain principles would be orientated to dominate the conscience, or to assign power to certain social groups (sociological explanations, as in Marx, or of a voluntary style as in Nietzsche). In effect, once the intellectual character of the principle is not accepted, there is a tendency to see it as a pure practical function. The will, or perhaps an obscure vital human force, would lead the mind to create pseudo-theoretical axioms, which ultimately will be interpreted as tools of praxis.[40]

But even this is an ultimate explanation, which basically acts for such positions as intellectual, thus denying the contents of the principles. Are statements, such as, "the first principles are human creations," actually true? In fact, the philosophical schools, which reduce the truth of the first principles to aspects of power, dominion, will, utilities, and life, conceive them differently. Consequently, their proponents succeed only in contradicting their very utterances; they propose an intellectual hypothesis geared towards intellectual theories' devaluation and end up in a kind of practical self-contradiction.[41]

38 See J. J. Sanguineti, *Introduzione alla gnoseologia*, 178.
39 See *Met*, IV, 1006a 15; 1006b 20–25.
40 See J. J. Sanguineti, *Introduzione alla gnoseologia*, 178–179.
41 See J. J. Sanguineti, *Introduzione alla gnoseologia*, 179.



Sanguineti underlines other prominent schools whereby the first principles are accepted as *a priori*. We had a fairly extensive survey about them previously, that is, philosophical schools, like rationalists and idealists, who recognise the first principles as authentic theoretical contents.[42] According to Sanguineti, since these schools cannot see how the notion of the first principles could emerge from reality or experience, they see these fundamental principles as positions that are *a priori* of the human reason.[43] As in the previous schools of thought, there are varied forms and degrees of this position; one worth mentioning is the Kantian transcendental idealism.[44] In this position the first principles are viewed as rational creation, as also is the case in absolute idealism. Rationalists see the first principles as rational *a priori* intuitions. Sanguineti perceives a shift in the contemporary rational tendency, which considers them as hypotheses, conjectures, and rules, so their epistemological immediacy is abandoned. Ultimately, Sanguineti observes that these indirect ways of offering support to the hypothetical principles are not able to overcome a real foundation. Equally, the recognition of the same deductive-hypothetical method cannot circumvent some 'immediate vision' of intelligence, which justifies the appropriateness and reasonableness of the method.[45]

In view of the evidence demonstrated by Aquinas and the sample interpretations, it is obvious that the first principles as realistic foundational values cannot be contradicted. Rather, whoever seems to contradict them, confirms them indirectly with the very propositions aimed at rebuttal. Thus their demonstration is possible only by indirect proof. Following this important nature of the first principles, let us briefly consider the role of the PNC as the paradigm demonstration *ad absurdum*.

### *d. The Place of Dialectic in the Demonstration of the Principles*

The PNC assumes a vital function in any demonstration *ad absurdum*. The PNC is invariably proved true since it is undeniable. Berti notices the pragmatic refutation of the denial of the PNC. This is to be noted that, even to those who claim to deny the PNC, in fact, with their practical behaviour, show that they admit it.[46] Berti asserts that the Aristotelian demonstration of the 'undeniability' of the PNC provides, for the first time, a truth that previously had been evident not only to philosophers, but also to every human person, precisely, that reality does

42 On this argument, see our Chapter One on the philosophical positions of thought, especially, the subtitles: *Rationalism*; *Idealism and Kant*. See also our Chapter Four under the subtitle: *Kant's Hypotheses and Formulation of the PNC*.
43 See J. J. Sanguineti, *Introduzione alla gnoseologia*, 179.
44 For further reading on this concept, see our discourse in Chapter One of this research on *Idealism and Kant* and in Chapter Four on *Kant's Hypotheses and Formulation of the PNC*.
45 See J. J. Sanguineti, *Introduzione alla gnoseologia*, 180.
46 See E. Berti, *Contraddizione e dialettica*, 114.

not admit contradictions, as contemplated through the PNC.[47] Consequently, the PNC's correspondence to reality forms the basis for every other demonstration, because reality cannot contradict itself.

There is yet an elevated aspect of this analysis of the significance of the PNC in the proof *ad absurdum*. The PNC as the fundamental proof has a transcendental dimension, that of leading to natural theology through the negative theological method. On this, scholars like Berti, suggest that within such a refutation (through PNC) is manifested what can be seen as the 'theological' value of the PNC, that is, the ability to demonstrate by means of the PNC, or better through the destruction of all its negation, the absolute transcendence, namely, the existence of God.[48] Berti aptly finds in the Aristotelian conception this transcendental connection. According to him, this implies that the existence of God is required by the defence of the PNC and that its proof must be accomplished through the PNC.[49] Aristotle has been very sparing of such an explanation, except implicitly, in the affirmation of the need for the transcendent God, provided we use the principle of causality.

Considering the above, Berti proposes that if the defence of the PNC and the proof of the absolute transcendence is parallel, the supposed 'ontology', or general metaphysics, implies natural 'theology'. This is the 'theology' in which the absolute is not the object, but the ultimate solution on which to recourse for safety from contradiction, namely, a dialectical and negative theology.[50]

In line with Berti, we affirm that, if the proof of the transcendence of the Absolute assumes the defence of the PNC, which is nothing but the position and the defence of the experience of reality, one can propose that in the act of raising a metaphysical problem, one detects the immediate need for a transcendent solution.[51] A further discussion of this problem would need a more accurate study of the principle of causality. Hence, we can rightly propose, after the mind of Aquinas, that metaphysics is embellished by dialectics through which it makes its most subtle and ultimate discoveries, as in the first principles. This implies that proper fundamental metaphysical knowledge like that of the first principles

47 See E. Berti, *Contraddizione e dialettica*, 115.
48 See E. Berti, "Il valore "teologico" del principio di non contraddizione nella metafisica aristotelica," *Rivista di filosofia neo-scolastica* LX (1968), 1–24, 2.
49 See E. Berti, "Il valore "teologico" del principio di non contraddizione, 18.
50 See E. Berti, "Il valore "teologico" del principio di non contraddizione, 23–24.
51 See E. Berti, "Il valore "teologico" del principio di non contraddizione, 24. For more details on this nuance of the metaphysics, see also: M. Gentile, *Filosofia e umanesimo* (Brescia: La scuola, 1947); M. Gentile, *Come si pone il problema metafisico* (Padova: Liviana, 1955). See also G. R. Bacchin, *Originarietà e mediazione nel discorso metafisico* (Roma: Jandi Sapi, 1963); G. R. Bacchin, *Su l'autentico nel filosofare* (Roma: Jandi Sapi, 1963); G. R. Bacchin, *L'originario come implesso, esperienza-discorso* (Roma: Jandi Sapi, 1963).



is established through dialectical inquiry, with *intellectus et ratio* and not simple immediate intuitions. Subsequently, let us examine the notion of evidence of the first principles in Aquinas.

## B. Aquinas and the *Per se* and *Per se notum*

The preceding survey helps us to establish that the first principles admit no demonstration; hence, are indemonstrable. In our former chapters, also, we discovered that they are known immediately. Our aim here is to ascertain the implication of the immediate knowledge and the *per se nota*. To do so we have to show that in our previous analyses both the speculative and the practical fields are closely associated in the expression of the truth of the self-evidence of the principles. But what is the realistic philosophical implication of this self-evidence? We shall come to that in our subsequent discourse on the *per se nota*; it suffices here to know that Aquinas distinguishes the 'self-evident' in different categories and applications. We want to take a cursory glance at the *per se*, because it can easily be confused with the *per se notum* in Aquinas.

Sometimes the *per se* proposition and the *per se notum* can be united but not always. The reason is that not every truth that is formulated in a *per se* proposition is *per se notum*, and conversely, not every reality that is *per se notum* is parallel to a *per se* proposition. While the *per se* proposition is opposed to the *per accidens*, the *per se notum* has, as its contrary, the 'mediately known' (*per aliud notum*).[52] Aquinas depicts this contrast between the *per se notum* and the *per aliud notum* in the illustration, as follows:

> Now a truth is subject to a twofold consideration – as known in itself, and as known through another. What is known in itself, is as a 'principle,' and is at once understood by the intellect. ... On the other hand, a truth which is known through another, is understood by the intellect, not at once, but by means of the reason's inquiry, and is as a 'term.'[53]

Aquinas often shows that this sort of conclusion of a true demonstration is a *per se* proposition. Accordingly, he submits: "Predication *per se* is proper to

52 See P. Hoenen, *Reality and Judgment According to St. Thomas*, C. Boyer appendix; Henry F. Tiblier trans. (Chicago: H. Regnery, 1952), 96.
53 See *ST*, I-II, q. 57, a. 2: "Verum autem est dupliciter considerabile, uno modo, sicut per se notum; alio modo, sicut per aliud notum. Quod autem est per se notum, se habet ut principium; et percipitur statim ab intellectu. ... Verum autem quod est per aliud notum, non statim percipitur ab intellectu, sed per inquisitionem rationis, et se habet in ratione termini."

demonstrative science. ... Demonstration is concerned exclusively with items that are *per se* in things. For such are its conclusions and from such does it demonstrate."[54] Conversely, Aquinas also asserts that not everything that is *per se notum* is articulated by a *per se* proposition, a proposition that establishes a necessary link between the subject and the predicate. From Aquinas, we appreciate that even though the term *per se notum* applies usually to immediately known principles, we also apply 'self-evident' to anything we recognise as known through immediate simple sense perception; it is known directly, without the mediation of another thing. According to Aquinas: "the existence of nature is known *per se*, insofar as natural things are manifest to the senses."[55] It follows, then, that the notion of *per se notum* and that of the of a '*per se* proposition' are not exactly coincident.

### *B.1.1 A Glance at the Thomistic Notion of the* Per se

We begin with a brief inquiry into the notion of the *per se*. In a proposition, the subject possesses a material function and signifies the *suppositum* (*tenetur materialiter; tenetur pro supposito*); conversely the predicate possesses the function of a nature or form (*tenetur formaliter*).[56] In regard to the subject, the rule is universally valid; nonetheless, there are some instances wherein the subject, because of its content (*ratio*), assumes the function of a form, while still retaining its material function. This is applicable to the *per se* propositions. Concerning this, there exists not only a connection of material identity, as is the case in every proposition, in which there is an accidental and simple encounter between the form of the subject and that of the predicate in an identical substrate. Rather, in the *per se* proposition the two forms themselves are correlated. The form of the subject necessarily implies that of the predicate. Hence, as Hoenen appositely suggests, because the *per se* proposition possesses a formal network, it is regarded as a '*per se* proposition.'[57]

We perceive in Aquinas prominent instances of his use of the *per se*. Evidently, the *per se* does not originate from him but from Aristotle. However, the Angelic Doctor applied it in specific contexts. To appreciate Aquinas' employment of the *per se*, we shall accentuate the meaning he attaches to both words. Aquinas expounds:

54 *In I APst*, lect. 35, n. 2 and 3: "Demonstrativae scientiae propria est praedicatio per se ... Demonstratio est solum circa illa, quae per se insunt rebus. Tales enim sunt eius conclusiones, et ex talibus demonstrat."

55 See *In II Phys*, lect. 1, n. 148: "Naturam autem esse, est per se notum, inquantum naturalia sunt manifesta sensui."

56 See *ST*, III, q. 16, a. 7, ad 4: "Terminus in subiecto positus tenetur materialiter, idest pro supposito, positus vero in praedicato, tenetur formaliter, idest pro natura significata." See also *ST*, III, q. 16, a. 9: "Nec obstat quod incipere esse convenit humanae naturae, quae significatur per hoc nomen homo, quia terminus in subiecto positus non tenetur formaliter pro natura, sed magis materialiter pro supposito."

57 See P. Hoenen, *Reality and Judgment According to St. Thomas*, 95.



> In regard to the first it should be noted that this preposition *per* ['in virtue of' or 'by'] denotes a causal relationship, although sometimes it also signifies a state, as when someone is said to be *per se*, i.e., by himself, when he is alone. But when it designates a relationship to a cause, sometimes the cause is formal, as when it is stated that the body lives in virtue of the soul; sometimes the relationship is to a material cause, as when it is stated that a body is coloured in virtue of its surface, i.e., because the surface is the subject of colour; again, it might even designate a relationship to an extrinsic cause, particularly an efficient cause, as when it is said that water is made hot in virtue of fire. But just as this preposition *per* designates a relationship to a cause, when something extrinsic is the cause of that which is attributed to the subject, so also when the subject or something pertaining to the subject is the cause of that which is attributed to the subject. This latter is what *per se*, i.e., in virtue of itself, signifies.[58]

From the foregoing excerpt, Aquinas explicates that *per* indicates that there is a relation of causality (*habitudinem causae*); sometimes, it points to a situation as when an individual is said to be *per se*. In the causal relationship, sometimes the cause is formal or material, or even an external efficient cause. As the preposition *per* indicates a relation of cause from the external for something else, in the same way, *per se* functions for the subject that wholly or partly is caused by its very (own) attributes. It is obvious from the preceding that Aquinas relates the *per se* with various kinds of the Aristotelian causality. We shall not delve into that analysis within this discourse so as not to deviate from our principal inquiry. It is enough to say that the four moments articulated by Aquinas are unified in linear process in their accent to the varied forms of causality starting from the intrinsic through the extrinsic order and that they are detached temporarily in Aquinas' analysis.[59]

Further, in designating the *per se*, while commenting on Aristotle, Aquinas underscores four ways of being *per se*. The first instance is when that which is predicated of a subject belongs to its form. Secondly, the *per se* could be predicated of the thing's matter or subject; that is when something predicated corresponds

58 *In I APst*, lect. 10, n. 2: "Circa primum sciendum est quod haec praepositio per designat habitudinem causae; designat etiam interdum et situm, sicut cum dicitur aliquis esse per se, quando est solitarius. Causae autem habitudinem designat, aliquando quidem formalis; sicut cum dicitur quod corpus vivit per animam. Quandoque autem habitudinem causae materialis; sicut cum dicitur quod corpus est coloratum per superficiem: quia scilicet proprium subiectum coloris est superficies. Designat etiam habitudinem causae extrinsecae et praecipue efficientis; sicut cum dicitur quod aqua calescit per ignem. Sicut autem haec praepositio per designat habitudinem causae, quando aliquid extrinsecum est causa eius, quod attribuitur subiecto; ita quando subiectum vel aliquid eius est causa eius, quod attribuitur ei, et hoc significat per se."

59 For further details on the analysis on the notion of causality of the *per se* in Aquinas, see K. L. Flannery, *Acts Amid Precepts: the Aristotelian Logical Structure of Thomas Aquinas's Moral Theory* (Washington (DC): Catholic University of America Press, 2001), 237–240.

to something which is a part of the definition of the predicate. The third mode of *per se* is when the predication does not bind the subject as in something that 'exists' *per se*. Aquinas clarifies that this third mode is not a predication as such, but a mode of existing *per se*; in effect it is not 'predicated' *per se* but 'is' *per se*. The fourth of the modes of *per se* predications is when the preposition *per* corresponds to an effect that is included in the subject (thing) by reason of the thing (subject) itself (*inest unicuique propter seipsum*). Conversely, whatever does not belong to the thing because of the thing itself appertains to it *per accidens*.[60]

Consequently, Aquinas gives precedence to the *per se* that is essentially of its own and not by way of definition. In view of the above, it is apparent that the *per se* in Aquinas' understanding assumes a universal character at different or diverse categories and at all levels. This is because the *per se* is that which is 'in virtue of itself'. Following this, Aquinas portrays that in the scientific demonstrations and propositions the *per se* is the universally predicated. Therefore, Aquinas asserts:

> For in the propositions of a demonstration it is required that something be predicated universally – which he signifies by the term "said of all" – and *per se*, i.e., in virtue of itself, and 'first' – which he signifies by the words, "commensurately universal." But these three things are related by adding something to the previous one. For whatever is predicated *per se* is predicated universally [i.e., of all], but not vice versa. Again, whatever is predicated 'first' is predicated *per se*, but not vice versa. This, therefore, shows why they are arranged as they are.[61]

As is evident from the preceding Thomistic extract, the 'first' plays the role of the *per se* which, in turn, is the universal predication in the demonstration of a science. This goes to prove the prominent status and character of the *per se* in Aquinas' philosophy. We shall not go into further analysis of the rest of the citation; we highlighted it because of the *per se*.

### *B.1.2 The* Per se notum *Principle*

Aquinas accentuated the *per se notum* in a number of his own writings and his commentaries on Aristotle. As Tuninetti fittingly states, the expression *per se notum* is the Latin translation of the Greek *δι᾽αὐτου γνωστόν*, which implies 'recognised by themselves' or 'recognisable in itself'. In Aristotle's *Topics*, we find

60 See *In I APst*, lect. 10, n. 3–7.

61 *In I APst*, lect. 9, n. 3 (73a 25): "Oportet enim in propositionibus demonstrationis aliquid universaliter praedicari, quod significat dici de omni, et per se, et etiam primo, quod significat universale. Haec autem tria se habent ex additione ad invicem. Nam omne quod per se praedicatur, etiam universaliter praedicatur; sed non e converso. Similiter omne quod primo praedicatur, praedicatur per se, sed non convertitur. Unde etiam apparet ratio ordinis istorum."



a parallel from the Aristotelian description of *per se notum* in the dialectic, the sciences, and why the first principles are *per se notum*. Accordingly, Aristotle in the translated excerpt below submits:

> Now a deduction is an argument in which, certain things being laid down, something other than these necessarily comes about through them. It is a demonstration, when the premises from which the deduction starts are true and primitive, or are such that our knowledge of them has originally come through premises which are primitive and true; and it is a dialectical deduction, if it reasons from reputable opinions. Things are true and primitive which are convincing on the strength not of anything else but of themselves; for in regard to the first principles of science it is improper to ask any further for the why and wherefore of them; each of the first principles should command belief in and by itself.[62]

Consequently, the *per se notum* is the thing (notion, idea, principle) that is led down and other things flow through it. It is the primitive judgment (premise) that is necessarily true in order to justify others that flow from it. Its convincing attribute comes from it and that explicates its independence and command of belief. As our concern is mainly the ontological feature of the *per se notum*, we shall avoid lengthy discourse on the dialectics and concentrate on the first principles.

As Tuninetti observes, the Latin translation of the above excerpt: "*Sunt vera quidem et prima quae non per alia se ipsa habent fidem* …"[63] could introduce vagueness since *per se ipsa*, in this instance, bespeaks *δι᾽αὐτων* ('through itself') in Greek. This is for the reason that the *per se* in other Latin translations of most works of Aristotle of *καθ᾽αὐτό* is 'in itself'. Since he was not conversant with Greek, Aquinas was not able to consider the Greek terms, but he underlined the double import of the translation.[64] Thus, Aquinas notes:

> A thing can be called self-evident in two ways, either because we can know it by nothing else except itself, as first principles are called self-evident; or because it is not accidentally knowable, as color is visible of itself, whereas substance is visible by its accident.[65]

62 *Top*, 100a 25–100b 20.

63 *Top*, 100a 30–100b 20 (Trans. Boethii ed. Minio-Paluello, 5, 14–15). The main part of the excerpt referred to is: "Things are true and primitive which are convincing on the strength not of anything else but of themselves."

64 See L. F. Tuninetti, *"Per se notum": die logische Beschaffenheit des Selbstverständlichen im Denken des Thomas von Aquin* (Leiden; New York; Köln: E.J. Brill, 1996), 42.

65 *ST*, I, q. 87, a. 1, ad 1: "Potest enim aliquid dici per se notum dupliciter, vel quia per nihil aliud in eius notitiam devenitur, sicut dicuntur prima principia per se nota; vel quia non sunt cognoscibilia per accidens, sicut color est per se visibilis, substantia autem per accidens."

From the foregoing Thomistic citation, it is evident that our major interest is articulated in the first sort of the Thomistic distinction of the *per se nota* because they are about the first principles. However, we will suspend this discourse at this point and come to terms first with the expression.

On several occasions, in our Chapter Two, we made cursory references to Aquinas' accent on the principles as *per se nota*.[66] Since we did not specify the implication of the *per se nota* in the Thomistic usage, we shall attempt herein to understand better why the principles can be known as such. We identified previously that considered in themselves the first principles are not just 'necessary' in their being and 'true', but most importantly 'immediate' (*per se nota*); this sense of 'immediacy' as regards the first principles implies that their 'truth' is understood without intermediary notions or middle terms. As Gardeil affirms, we only need to apprehend the signification of the constituting terms of each principle and the truth of the proposition becomes immediately evident. In this sense first principles are understood as 'known through themselves' or are 'self-evident' (*per se nota*).[67] If the principles are self-evident, as we just noted, how do we talk about their demonstration? Are there ways to know the first principles other than through themselves? To properly attend to the questions, we have to clarify with Aristotle that by demonstration we mean that they defy 'scientific deduction', and the latter further implies the aptitude in virtue of which something is appropriately understood.[68]

Aristotle blazes the trail in the proposal that the first principles are indemonstrable.[69] For Aristotle, there is science where a conclusion is demonstrated from

66 As the preceding *per se notum* is the singular form of the *per se nota*, we might use them interchangeably depending on the most suitable in each circumstance. We use *per se nota* herein to depict plurality.

67 See H. D. Gardeil, *Introduction to the Philosophy of St. Thomas Aquinas: IV Metaphysics*, 108. See also Aristotle's *APr*, 64b 36–37 on the first principles as things naturally known through themselves.

68 See *APst*, 71b 18–19.

69 See *APst*, 71b 26–72a 8. According to Aristotle: "They must depend on what is primitive and non-demonstrable because otherwise you will not understand if you do not have a demonstration of them; for to understand that of which there is a demonstration non-accidentally is to have a demonstration. They must be both explanatory and more familiar and prior – explanatory because we only understand when we know the explanation; and prior, if they are explanatory, and we are already aware of them not only in the sense of grasping them but also of knowing that they are. Things are prior and more familiar in two ways; for it is not the same to be prior by nature and prior in relation to us, nor to be more familiar and more familiar to us. I call prior and more familiar in relation to us what is nearer to perception, prior and more familiar *simpliciter* what is further away. What is most universal is furthest away, and the particulars are nearest; and these are opposite to each other. Depending on things that are primitive is depending on appropriate principles; for I call the same thing primitive and a principle. A principle of a demonstration is an immediate proposition, and an immediate proposition is one to which there is no other prior."



principles which do not require to be demonstrated.[70] As such, as we highlighted earlier, *per se notum* is precisely what is known so that it can serve as a principle in a scientific demonstration.[71] Aquinas not only consolidates this Aristotelian teaching but also contributes largely to its clarification and justification in God as the first ultimate principle.

As Sanguineti appositely notes, in realistic philosophy the investigation into the noetic principles usually progresses further to the study of the ultimate real principles. This survey invariably concludes with the science of God, the 'ultimate principle' in our regard (*quoad nos*) and the 'first principle' with regards to the universe (*quoad se*).[72] When a principle is 'first' in an absolute manner, its comprising terms are also absolutely first or simple; it cannot be reduced to prior notions. If the principles could be reduced, they would not authenticate sciences since each science has its particular principles that may not be absolutely first. Nonetheless, whether absolutely first or not, the principles are the beginnings for every science because the sciences rest on them.[73] Hence, Aquinas corroborates "the object of the principles and of the whole science must be the same, since the whole science is contained virtually in its principles."[74] Besides, any realistic development presupposes and implies the principles. Thus since the metaphysical reality is the ultimate, its principles are most fundamental because all other knowledge in other spheres are properly reduced to them.

If the principles are actually ultimate, they cannot be justified; instead, they serve as proofs of justification for others. In this case we refer to the noetic principles in regard to us (*quoad nos*). Wherefore if a principle is real in itself (*quoad se*) but is not immediately evident, then arises the need for its reduction to some principles that are instantly evident to us. Hence the Thomistic dual notion of the *per se notum*, the *per se quoad se* and *per se quoad nos*.[75] Although quite explicit, these dual senses of the *per se notum* present us with the puzzle of demonstration and application of the principles.

Further in his study, Aquinas, like Aristotle, submits that: "Self-known principles are such as are known as soon as the terms are understood, from the fact that the predicate is contained in the definition of the subject."[76] When we talk about

70 See *Top*, 100a 25–30.

71 See L. F. Tuninetti, "Scienza aristotelica e domanda su Dio in Tommaso d'Aquino (Summa Theologiae, I, q. II., a. 1 e a. 2)," in *Fede, cultura e scienza*, M. Mantovani; M. Amerise, eds. (Città del Vaticano: Libreria Editrice Vaticana, 2008), 367–379, 369.

72 See J. J. Sanguineti, *Introduzione alla gnoseologia*, 187.

73 See *Top*, 100a 30–32.

74 *ST*, I, q. 1, a. 7: "Idem autem est subiectum principiorum et totius scientiae, cum tota scientia virtute contineatur in principiis."

75 See *ST*, I, q. 2, a. 1.

76 *ST*, I, q. 17, a. 3, ad 2: "Principia per se nota sunt illa quae statim, intellectis terminis, cognoscuntur, ex eo quod praedicatum ponitur in definitione subiecti."

predicate we indicate with Aquinas that it is not simply a linguistic implication of predicate but the real import of the word to the thing as in 'substrate' (*Substrat*) as used by Tuninetti.[77] We imply, as Grisez remarks, that the predicate being the content of the intelligibility of the subject does not signify that one constituent of a composite meaning could be found among others within the compound. Accordingly, he added that, for Aquinas, the subject and the predicate are complementary features of a holistic and unified knowledge of a distinct objective aspect of the known reality.[78] A thing naturally is experiential and most of the dimensions of our knowledge of the thing are founded in our experience of it.

To further clarify Aquinas' notion of the *per se nota*, Grisez acknowledges that there are two aspects of self-evidence. Viewed from one dimension, a principle is only self-evident if it cannot be derived from some previous principle, which serves as its foundation. From another dimension, a principle can be effective either as a starting point for an inquiry or as a limit of proof only if its underivability is evident. Underivability, which is the objective feature of self-evidence, is substantiated by the lack of a middle term, which could link the subject and predicate of the principle to provide the cause of its truth. On the other hand, the recognition of underivability as the subjective aspect of self-evidence compels an individual to possess an adequate understanding of the signification of the principle. The latter is to guard against any efforts whatsoever towards the provision of the principle's derivation because it would be fruitless.[79]

To appreciate better the Thomistic notion of the *per se notum* in its relationship with the principles, we shall closely examine an article of the *Summa Theologiae* (I-II, q. 94, a. 2). Although, as scholars like Grisez[80] and Flannery[81] appositely observed, this article is not primarily about the *per se notum*, Aquinas introduces the idea of the *per se notum* in order to portray that the Aristotelian science and the natural law have the same structure. On our part, the mentioned article assumes an important role because of its appropriate blend of the elements we wish to investigate in this section. It is expected to enhance our understanding of the argument since the mentioned article contains the two aspects of the exemplary principles, namely, the speculative and the practical.

### *B.1.3 The Different Domains of the* Per se nota *Principles*

Perhaps the most important and comprehensive of Aquinas' writings for understanding this notion in both the speculative and the practical reason is Article 2

77 See L. F. Tuninetti, *"Per se notum"*, 168.
78 See G. G. Grisez, "The First Principle of Practical Reason: A Commentary on the Summa Theologiae, 1-2, Question 94, Article 2," in *Natural Law Forum* 10 (1965), 168–201, 173.
79 See G. G. Grisez, "The First Principle of Practical Reason, ..." 173.
80 See G. G. Grisez, "The First Principle of Practical Reason, ..." 168–169.
81 See K. L. Flannery, *Acts Amid Precepts*, 26.



of Question 94 of the *Prima Secundae* of the *Summa Theologiae*. In recent times, the mentioned article has also been fundamental in the considerations of most ethical Thomists, like Grisez,[82] Finnis,[83] May,[84] Brock,[85] among others, because of its basic articulation of the natural law theory. However, as our inquiry is not about the natural law as such, we will not investigate that in this research. We only highlight it to show how crucial the article is within the forum of moral discourse at the level of the principles.

In the article, Aquinas shows the significance he attaches to the very idea he wishes to share by the way he configures the objections and the *Sed contra*. The objections try to argue that there is only one precept, the content of the natural law. Aquinas responds to these by indicating that the objections are partly wrong and partly right. We see this nuance, especially, in the second response to the objections. The Angelic Doctor vividly responds that "the precepts of the natural law are many in themselves, but are based on one common foundation."[86] It functions in association with the speculative 'foundation' for the principles, the PNC, as we also saw in our preceding chapter. Additionally, Aquinas does not give the impression in the foregoing that there is only one precept, but that the many precepts share a common 'foundation'; all the precepts are reducible to the one central super-evident precept, wherein every precept is founded. It is the point of reference 'toward which', as Flannery appositely affirms, the rest are directed and through which they receive their intelligibility as precepts.[87] It is to this that we equally retrace our being – that of being 'good'. The 'good' remains good in its right not because it participates in any good that ranks above it,[88] but for the reason that it possesses full intelligibility on its own.

82 See G. G. Grisez, "The First Principle of Practical Reason: A Commentary on the Summa Theologiae, 1–2, Question 94, Article 2," in *Natural Law Forum* 10 (1965), 168–201. See also G. G. Grisez, J. Boyle, J. Finnis, "Practical Principles, Moral Truth, and Ultimate Ends," in *The American Journal of Jurisprudence* 32 (1987), 99–151.
83 See J. Finnis, *Fundamentals of Ethics* (Oxford: Clarendon Press, 1983). See also J. Finnis, *Moral Absolutes: Tradition, Revision, and Truth* (Washington (DC): Catholic University of America Press, 1991). See also J. Finnis, *Aquinas: Moral, Political, and Legal Theory* (Oxford: Oxford University Press, 1998).
84 See W. E. May, *An Introduction to Moral Theology* rev. ed. (Huntington (IN): Our Sunday Visitor, 1994).
85 S. Brock, «Ars imitatur naturam: Un aspecto descuidado de la doctrina de la ley natural en S. Tómas de Aquino,» in *El hombre: immanencia y trascendencia: actas de las XXV Reuniones filosóficas de la Universidad de Navarra*, ed. R. Alvira (Pamplona: Servicio de Publicaciones de la Universidad de Navarra, 1991), 383–395.
86 *ST*, I–II, q. 94, a. 2, ad 2: "Sunt multa praecepta legis naturae in seipsis, quae tamen communicant in una radice."
87 See K. L. Flannery, *Acts Amid Precepts*, 28. For further details on these analyses, see our Chapter Four on *Habits of the First Principles*.
88 See K. L. Flannery, *Acts Amid Precepts*, 28.

Through the *Sed contra*, Aquinas primarily underlines the correspondence between the practical and speculative principles. Accordingly, he submits: "The precepts of the natural law in man stand in relation to practical matters, as the first principles to matters of demonstration. But there are several first indemonstrable principles. Therefore, there are also several precepts of the natural law."[89] Aquinas uses here the word 'precepts' for practical matters and 'principles' for theoretical matters.

In the body of the article, Aquinas succinctly represents the foregoing idea of reciprocity and mutual affiliation between the speculative and the practical realms. To do so, the Angelic Doctor first highlights that "the precepts of the natural law are to the practical reason what the first principles of demonstrations are to the speculative reason, because both are self-evident principles."[90] From the outset, Aquinas uses 'precepts' in the plural form. This is suggestive of the fact that there are many precepts subsumed under the natural law.[91] Aquinas confirms the analogical propinquity between the theoretical and the practical principles as *per se nota*. He follows this up immediately with an explanation meant to clarify this first assertion. The Angelic Doctor introduces two basic distinctions of the *per se nota*: *secundum se* and *quoad nos*. He goes further to illustrate the content of the *per se nota* propositions that substantiates their self-evidence. Thus, he affirms:

> Now a thing is said to be self-evident in two ways: first, in itself; secondly, in relation to us. Any proposition is said to be self-evident in itself, if its predicate is contained in the notion of the subject: although, to one who knows not the definition of the subject, it happens that such a proposition is not self-evident.[92]

89 *ST*, I–II, q. 94, a. 2, sc: "Sed contra est quia sic se habent praecepta legis naturalis in homine quantum ad operabilia, sicut se habent prima principia in demonstrativis. Sed prima principia indemonstrabilia sunt plura. Ergo etiam praecepta legis naturae sunt plura."

90 *ST*, I–II, q. 94, a. 2: "Praecepta legis naturae hoc modo se habent ad rationem practicam, sicut principia prima demonstrationum se habent ad rationem speculativam, utraque enim sunt quaedam principia per se nota."

91 In an attempt to represent this idea of plurality of the precepts in Aquinas' concept of the natural law, Maritain submits that: "Natural law is the ensemble of things to do and not to do which follow … in necessary fashion." See J. Maritain, *Man and the State* (Washington (DC): Catholic University of America Press, 1998), 90. See also G. G. Grisez, "The First Principle of Practical Reason, …" 172.

92 *ST*, I–II, q. 94, a. 2: "Dicitur autem aliquid per se notum dupliciter, uno modo, secundum se; alio modo, quoad nos. Secundum se quidem quaelibet propositio dicitur per se nota, cuius praedicatum est de ratione subiecti, contingit tamen quod ignoranti definitionem subiecti, talis propositio non erit per se nota."



Although not specified in this passage, the above-mentioned *secundum se* in some cases does not exclude the *quoad nos*. In other words, they are not mutually exclusive. The Angelic Doctor portrays this in another article where he suggests that "a thing can be self-evident in either of two ways: on the one hand, self-evident in itself, though not to us; on the other, self-evident in itself, and to us."[93] He further explains in the same article the implication of the immediateness of the self-evidence on two grounds, as follows:

> If, therefore the essence of the predicate and subject be known to all, the proposition will be self-evident to all; as is clear with regard to the first principles of demonstration, the terms of which are common things that no one is ignorant of, such as being and non-being, whole and part, and such like. If, however, there are some to whom the essence of the predicate and subject is unknown, the proposition will be self-evident in itself, but not to those who do not know the meaning of the predicate and subject of the proposition. Therefore, it happens, as Boethius says (*Hebdom.*, the title of which is: "Whether all that is, is good"), "that there are some mental concepts self-evident only to the learned, as that incorporeal substances are not in space." Therefore I say that this proposition, 'God exists', of itself is self-evident, for the predicate is the same as the subject, because God is His own existence … Now because we do not know the essence of God, the proposition is not self-evident to us; but needs to be demonstrated by things that are more known to us, though less known in their nature – namely, by effects.[94]

The Angelic Doctor begins here with the sort of self-evidence that is common to all or what we might articulate as universally known (*omnibus per se nota*). This is the place of the first indemonstrable principles as we ascertained in our previous chapter. He singles out self-evident principles only known to the wise (*per se notae, apud sapientes tantum*). In this category, Aquinas refers to "some mental

93 *ST*, I, q. 2, a. 1: "Per se notum dupliciter, uno modo, secundum se et non quoad nos; alio modo, secundum se et quoad nos."

94 *ST*, I, q. 2, a. 1: "Si igitur notum sit omnibus de praedicato et de subiecto quid sit, propositio illa erit omnibus per se nota, sicut patet in primis demonstrationum principiis, quorum termini sunt quaedam communia quae nullus ignorat, ut ens et non ens, totum et pars, et similia. Si autem apud aliquos notum non sit de praedicato et subiecto quid sit, propositio quidem quantum in se est, erit per se nota, non tamen apud illos qui praedicatum et subiectum propositionis ignorant. Et ideo contingit, ut dicit Boetius in libro de Hebdomadibus, quod quaedam sunt communes animi conceptiones et per se notae, apud sapientes tantum, ut incorporalia in loco non esse. Dico ergo quod haec propositio, Deus est, quantum in se est, per se nota est, quia praedicatum est idem cum subiecto; deus enim est suum esse, … Sed quia nos non scimus de deo quid est, non est nobis per se nota, sed indiget demonstrari per ea quae sunt magis nota quoad nos, et minus nota quoad naturam, scilicet per effectus." See *ST*, I–II, q. 94, a. 2.

concepts ... as that incorporeal substances are not in space." The Angelic Doctor distinguishes a third kind of the *per se notum* that is neither known to all nor to the wise directly except through its effects. In this class, Aquinas locates God, who is an optimal *per se notum* but *secundum se et non quoad nos*.[95] This Thomistic extract runs parallel to the article we are considering as regards mainly the speculative principles. The examples that Aquinas uses to sustain his assertions are similar to our main article of analysis. It is obvious from the foregoing that the most acknowledged self-evident propositions are the universal principles. We suspend discourse on God as self-evident for now; we hope to address it subsequently.

*a. A Brief Survey of the Speculative Principles as* Per se nota

Aquinas, in line with Aristotle, regards something in its fullest sense of self-evidence when its obviousness is known by the wise.[96] As Flannery appositely remarks, this is characteristic of Aquinas, unlike some contemporary methods, which are basically empirical. For Aquinas the latter kind of knowledge holds but it is more subjective compared to the knowledge established on the *per se notae solis sapientibus*.[97] One can easily perceive that for Aquinas as well as Aristotle knowledge is epistemological and arises from the self-evident. For them knowledge is the fruit of demonstrations established on the true and primitive notions. Hence, commenting on Aristotle, Aquinas submits:

> If scientific knowing is what we have stated it to be, namely, knowing the cause of a thing, etc., then it is necessary that demonstrative science, i.e., science acquired through demonstration, proceed from propositions which are true, first, and immediate, i.e., not demonstrated by some other middle, but clear in virtue of themselves (they are called 'immediate', inasmuch as they do not have a middle demonstrating them, but 'first', in relation to other propositions which are proved through them); and which, furthermore, are better known than, prior to, and causes of, the conclusion. Secondly, he justifies himself for not adding another element which, it might seem, should be added, namely, that demonstration proceeds from 'proper' principles. But he says that this is understood in virtue of the elements he did state. For since the propositions of a demonstration are causes of the conclusion, they must be its proper principles. For effects require proportionate causes.[98]

95 See *ST*, I, q. 2, a. 1. For further details on categorisations of the *per se nota*, especially, from the logical viewpoint, see also L. F. Tuninetti, *"Per se notum"*, Ch. 1.

96 On the development of this argument on the relationship of metaphysics as a wise man's inquiry, its intellectual flair, and its connectedness with intelligibility justified through causality, which is the wise person's most intelligible form of knowledge, see K. L. Flannery, *Acts Amid Precepts*, 32 footnote. See also *prooemium* of Aquinas' *Commentary on the Metaphysics*.

97 *ST*, I–II, q. 94, a. 2. See K. L. Flannery, *Acts Amid Precepts*, 32.



The above stated Thomistic commentary confirms that in Aquinas, as in Aristotle, scientific knowledge is caused by the self-evident principles of demonstration. This is like saying that without the proper principles of each science no knowledge exists as such. This shows that for the Angelic Doctor, the higher the principles of demonstrations, the more noble the science, as in the case of metaphysics, the science of the wise. Consequently, Aquinas indicates that the principles have a causal character as far as knowledge and being are concerned. From the preceding extract, it is apparent that Aquinas, as Flannery suggests, is not so much interested in contending the sources of knowledge but in its authenticity and structure. As a result, what in Aquinas' view is necessary and certainly known (either by a few or by all) is not always the same as in the contemporary viewpoint. The modern and postmodern investigation of knowledge is usually different in their approach of determining the indubitable.[99]

Since Aquinas' views on this argument are established and developed around that which originally is Aristotle's, one sees a parallel to the above text in Aristotle's *Physics*[100] and a seeming contradiction of that text in his *Posterior Analytics*[101] as regards the self-evident in relation to us. In the former, Aristotle identified what is self-evident to us as the more universal, while he appears to do the opposite in the latter. Hence, Aristotle assumes in his *Physics* that "we must advance from universals to particulars for it is a whole that is more knowable to sense-perception".[102] Conversely, in the *Posterior Analytics*, he seems to suggest that we begin with the particulars, which are *per se nota quoad nos* to advance

98 *In I APst*, lect. 4, n. 10–11 (71b 20–22): "Si scire hoc significat quod diximus, scilicet, causam rei cognoscere etc., necesse est quod demonstrativa scientia, idest quae per demonstrationem acquiritur, procedat ex propositionibus veris, primis et immediatis, idest quae non per aliquod medium demonstrantur, sed per seipsas sunt manifestae (quae quidem immediatae dicuntur, in quantum carent medio demonstrante; primae autem in ordine ad alias propositiones, quae per eas probantur); et iterum ex notioribus, et prioribus, et causis conclusionis. Secundo, ibi: sic enim erunt etc., excusat se ab additione alterius particulae, quae videbatur apponenda: quod scilicet demonstratio ex propriis principiis procederet. Sed ipse dicit quod hoc intelligitur per ea, quae dicta sunt. Nam si propositiones demonstrationis sunt causae conclusionis, necesse est quod sint propria principia eius: oportet enim causas esse proportionatas effectibus."

99 See K. L. Flannery, *Acts Amid Precepts*, 32.

100 See *Phys*, I, 1 (184a 21–25): "Now what is to us plain and clear at first is rather confused masses, the elements and principles of which become known to us later by analysis. Thus we must advance from universals to particulars; for it is a whole that is more knowable to sense-perception, and a universal is a kind of whole, comprehending many things within it, like parts."

101 See *APst*, 72a 1–5: "I call prior and more familiar in relation to us what is nearer to perception, prior and more familiar *simpliciter* what is further away. What is most universal is furthest away, and the particulars are nearest; and these are opposite to each other."

102 *Phys*, I, 1 (184a 21–25).

towards the universals that are *secundum se* (*simpliciter*).[103] In order to build his own hypotheses, Aquinas' clarifies the two Aristotelian assumptions. Considering these texts in his commentary on the *Posterior Analytics*, Aquinas tries to reconcile both notions. In a fairly extensive analysis, he elucidates what Aristotle could imply by both seeming contradictions, and offers his own verdict on how we determine the *per se nota quoad nos*. According to the Angelic Doctor:

> However, it seems that the contrary of this is found in *Physics* I, where it is stated that universals are prior in reference to us and later according to nature. But it should be said that there [in the *Posterior Analytics*] he is speaking of the order of 'singular' to universal absolutely; and this order must be taken according to the order of sensitive and intellectual knowledge in us. Now in us sensitive knowledge is prior to intellectual, because intellectual knowledge in us proceeds from sense. For this reason the 'singular' is prior and better known in relation to us than the universal. But in *Physics* I he is not speaking of the order of the universal to the 'singular' absolutely but of the order of the more universal to the less universal, for example of animal to man. In this case the more universal is prior and better known in reference to us. For in every instance of generation, that which is in potency is prior in time but is later according to nature; whereas that which is complete in act is prior by nature but later in time. Now one's knowledge of a genus is, as it were, potential in comparison to one's knowledge of the species in which all the essentials of a thing are actually known. Hence, too, in the generation of our science, knowledge of the more common precedes knowledge of the less common.[104]

From the foregoing extract, Aquinas aptly justifies Aristotle and shows that the latter makes his assumptions from different perspectives in the two texts in question. In one, *Posterior Analytics*, he remarks that Aristotle spoke "of the order of 'singular' to universal absolutely; and this order must be taken according to the order of sensitive and intellectual knowledge in us."[105] While in *Physics*, he rightly perceives that Aristotle "did not speak of the order of the universal to the 'singular' absolutely but of the order of the more universal to the less universal, for example of animal to man. In this case the more universal is prior and better known in reference to us."[106] Through that Aquinas hypothesises that "in the generation of our science, knowledge of the more common precedes knowledge of the less

103 *APst*, 72a 1–5.
104 *In I APst*, lect. 4, n. 16.
105 *In I APst*, lect. 4, n. 16.
106 *In I APst*, lect. 4, n. 16.



common."[107] Still on the commentary, the Angelic Doctor further distinguishes between two categories of the better known in relation to us. He establishes a distinction between the sensitive and the intellectual knowledge with regards to the prior known in reference to us, and concludes that the better known to us is not just sensitive but most importantly intellectual. Therefore, what is better known to us is the universal, used for demonstrations, and which is in the intellect. Thus, Aquinas corroborates:

> Again, in the *Physics* it is stated that it is natural for us to proceed from what is better known to us. Therefore, it seems that a demonstration is composed not of things that are prior absolutely but in reference to us. But it must be said that here he is speaking according to the fact that what is in the sense is better known in reference to us than what is in the intellect; but there he was speaking according to the fact that what is better known in reference to us is also in the intellect. But demonstrations do not proceed from singulars which are in the sense but only from universals, which are in the intellect. Or it might be said that in every demonstration one must proceed from things better known to us, provided they are not singulars but universals. For something is made known to us only by that which is more known to us.[108]

Thus, we have the universals as starting points in every inquiry. These universals are the principles of each scientific attempt. At this point, we consider it necessary to observe that the Thomistic notion of the known *per se* here, as we have so far ascertained, does not necessarily give a sense of obligation (necessity) as the translation self-evidence depicts it. Instead, the known *per se* in the Thomistic context could be likened to the known as it is in reference to us. The Thomistic epistemological view that certain things are actually known is not the sort of post-Cartesian nuance of whether we actually know. For Aquinas, since knowledge is real, he goes on to investigate the hierarchical order of these things known to us.[109] To what sort of *per se notum quoad nos*, then, is Aquinas

107 *In I APst*, lect. 4, n. 16.
108 *In I APst*, lect. 4, n. 16.
109 In his investigation on *ST*, I–II, q. 94, a. 2, Schuster elaborates on the sort of epistemological approach one discovers in Aquinas, especially in addressing the *per se nota*. According to him, it is no wonder that the Thomistic establishment and the derivation of the principles do not forgo metaphysical discussions. According to him: "Wer freilich mit der allgemeinen Erkenntnislehre des heiligen Thomas vertraut ist, wundert sich nicht, dass die Begründung und die Ableitung der Prinzipien nicht auf metaphysische Erörterungen verzichtet." J. Schuster, "Von den ethischen Prinzipien: eine Thomasstudie zu S. Th. Ia IIae, q. 94, a. 2," in *Zeitschrift für katholische Theologie* 57 (1933), 46. That is to say that Aquinas' approach has an epistemological character either for the *per se nota secundum se* or for the *per se nota quaod nos*, but not in the post-Cartesian sense. See also J. Schuster, "Von den

advocating in the principal text of our examination (*Summa Theologiae* I–II, q. 94, a.2)?

Definitely Aquinas could not mean the passage of *Posterior Analytics*, since his choice examples for the *per se notum quoad nos* are propositions of the universal character. He begins with the propositions that are generally known in our regard. For instance, he refers to Boethius who suggests that "certain axioms or propositions are universally self-evident to all; and such are those propositions whose terms are known to all, as, "Every whole is greater than its part.""[110] Aquinas recognises what Boethius fittingly notes that there is a general approval, because such statements are considered to be true *per se* and are not understood *per alia*. According to Aquinas, such statements are regarded as common because they could be commonly known by any intellect.[111] The reason for the common knowability is that in such propositions the predicate enters into the definition of the subject, since the predicate is of the essence of the subject ("*quia praedicatum est de ratione subiecti*"). Hence, as Aquinas submits, immediately the subject is nominated and the 'what' is understood, and then it is instantly clear that the predicate is in it (*et ideo statim nominato subiecto, et intellecto quid sit, statim manifestum est praedicatum ei inesse*).[112]

The preceding illustrates that Aquinas' connotation of the generally approved *per se notum quoad nos* is in line with the above-cited Aristotelian *Physics*. This general approval, as we have seen, is an indeterminate kind. Those who know such are not necessarily scientifically equipped with the understanding of the implications of such premises, which they grasped in an instant.[113] This is typical of Aquinas' epistemological tendency in the description of the general *per*

ethischen Prinzipien ..." 49–50, 52. For further reading see also J. I. Jenkins, *Knowledge and Faith in Thomas Aquinas* (Cambridge (UK); New York: Cambridge University Press, 1997), 11–50. See also D. M. Nelson, *The Priority of Prudence: Virtue and Natural Law in Thomas Aquinas and the Implications for Modern Ethics* (University Park (PA): Pennsylvania State University Press, 1992), 20. See also V. Preller, *Divine Science and the Science of God: A Reformulation of Thomas Aquinas* (Princeton (NJ): Princeton University Press, 1967), 81–83.

110 *ST*, I–II, q. 94, a. 2.

111 *In Boethii de Hebdomadibus* lect. 1: "Definit ergo animi conceptionem communem, dicens: communis animi conceptio est enuntiatio quam quisque probat auditam, idest quam quilibet approbat statim ut eam audit. ... unde oportet pervenire ad aliqua quae statim per se sunt nota. Unde dicuntur communes animi conceptiones, et communiter cadunt in conceptione cuiuslibet intellectus: cuius ratio est, quia praedicatum est de ratione subiecti; et ideo statim nominato subiecto, et intellecto quid sit, statim manifestum est praedicatum ei inesse." See also R. McInerny, *Boethius and Aquinas* (Washington (DC): Catholic University of America Press, 1990), 199–200. For further reading on Boethius and the *per se notum*, and the reception of the *per se notum* in the Middle Ages as *communis animi conceptio*, see also L. F. Tuninetti, "*Per se notum*", 48–58, 58–67.

112 See *In Boethii de Hebdomadibus* lect. 1.

113 See K. L. Flannery, *Acts Amid Precepts*, 35.



*se notum quoad nos*. They are effortlessly known as in the first principles; they are obvious and their knowledge is not founded on any scientific explanation as such. As Flannery proposes, this knowledge can be substantiated as one grows in the knowledge of the sciences, but they are not fixed to any scientific knowledge initially.[114] Hence through Aquinas' exposition of Boethius' *Hebdomads*, we perceive that instantaneous assent is a function of understanding the implication of what is either said or proposed.[115]

In line with the above, Aquinas emphasises another type of the *per se notum quoad nos*, which is only known to the wise (*per se notae solis sapientibus*). About this sort of proposition, there is no general assent because the meaning of the terms is not universally known. In order to know this kind a special training (experience) is required. For this reason Aquinas affirms:

> But some propositions are self-evident only to the wise, who understand the meaning of the terms of such propositions: thus to one who understands that an angel is not a body, it is self-evident that an angel is not circumscriptively in a place: but this is not evident to the unlearned, for they cannot grasp it.[116]

The above stated shows that, according to Aquinas, the known *per se* by the wise is equally self-evident on the grounds that experts who are endowed with such privilege properly understand the constituent terms.

### *b. A Synopsis of the Practical Precepts in Relation to the* Per se nota

On the ethical part of our choice text, after he had established the first universal principles from the theoretical unlimited dimension, Aquinas launched the practical aspect. Although Aquinas highlighted this notion initially (in the first paragraph) together with the theoretical part, his subsequent delay about its discourse is apparently a planned suspension. This is to suitably commence on the investigation after his ontological thesis, which is meant to clarify the practical part. In order to properly introduce the idea of the practical self-evident propositions, the Angelic Doctor constructs a link through the unlimited to the limited. Accordingly, Aquinas corroborates:

> Now a certain order is to be found in those things that are apprehended universally. For that which, before aught else, falls under apprehension, is 'being', the notion of which is included in all things whatsoever a man apprehends. Wherefore the first indemonstrable principle is that "the same

114 See K. L. Flannery, *Acts Amid Precepts*, 35.

115 See R. McInerny, *Boethius and Aquinas*, 200.

116 *ST*, I–II, q. 94, a. 2.

thing cannot be affirmed and denied at the same time," which is based on the notion of 'being' and 'not-being': and on this principle all others are based, ... Now as 'being' is the first thing that falls under the apprehension simply, so 'good' is the first thing that falls under the apprehension of the practical reason, which is directed to action: since every agent acts for an end under the aspect of good. Consequently the first principle of practical reason is one founded on the notion of good, viz. that "good is that which all things seek after." Hence this is the first precept of law, that "good is to be done and pursued, and evil is to be avoided."[117]

The preceding passage shows that the fundamentally obvious and most universally *per se notum* in reference to us is located in the metaphysical theoretical order about reality itself. As he had already underscored the analogous affinity between them in the first paragraph, Aquinas further confirms the primacy of the first ontological principle as known *per se quoad nos*. From there emerges the 'direct reason' concerning actions, namely, synderesis. On this point hinges a long-standing polemic among erudite Thomists, like Maritain[118] and Grisez[119] et al. Some articulate the precepts as knowable only through inclination and others think they are rational. What then could be the actual Thomistic notion about this knowledge of the first practical principles? We shall suspend this discourse here and come back to it shortly.

Aquinas establishes that a moral agent grasps the highest precepts. This agent understands that the highest precepts are the end of the process and, simultaneously, the highest of all, the peak of the first practical precepts. One can deduce that the agent is the wise/good man that knows the right choice. This implies, as Flannery assumes, that the moral agent grasps that they are more important than the lower precepts[120] and that they are justifications, as it were, of the lower. These are grouped under the good. Subsequently, the 'how' of the realisation of the good is spelt out in a practical way according to moral involvements. The moral agent understands that through the lower precepts he reaches the very end, the highest of all principles, the good. Besides, as the theoretical order is subsumed in 'being' through the PNC, in like manner, 'the good' is under the general umbrella of 'nature', the natural law as articulated in synderesis. We shall not investigate this argument again since we had a fairly long discourse on it in our preceding chapter.

Furthermore, there are a few parallels in Aquinas as regards the good and/or the first principle of practical reason about the *per se notum quoad nos*. However, they are what we could regard as offshoots of synderesis as we ascertained in our

117 *ST*, I–II, q. 94, a. 2.
118 See J. Maritain, *Man and the State*, 84–94.
119 See G. G. Grisez, "The First Principle of Practical Reason, ..." 172.
120 See K. L. Flannery, *Acts Amid Precepts*, 35.



previous investigation.[121] In his assessment of whether all moral precepts of the Law are reducible to the Decalogue, Aquinas asserts that there is no need to insert such laws as are obviously known to everyone in the Decalogue. Thus, he says:

Consequently two kinds of precepts are not reckoned among the precepts of the Decalogue: viz. first general principles, for they need no further promulgation after being once imprinted on the natural reason to which they are self-evident; as, for instance, that one should do evil to no man, and other similar principles: and again those which the careful reflection of wise men shows to be in accord with reason; since the people receive these principles from God, through being taught by wise men.[122]

Aquinas shows that other quasi self-evident principles are based on the principle of the good: "Thus it is right and true for all to act according to reason: and from this principle it follows as a proper conclusion, that goods entrusted to another should be restored to their owner."[123] The principle of restoration of deposits is a derived principle from the principle of right reason. We see another instance of a *per se notum quoad nos* precept in the Angelic Doctor about the love of God and love of neighbour:

But the moral precepts derive their efficacy from the very dictate of natural reason, even if they were never included in the Law. Now of these there are three grades: for some are most certain, and so evident as to need no promulgation; such as the commandments of the love of God and our neighbor, and others like these, ... which are, as it were, the ends of the commandments; wherefore no man can have an erroneous judgment about them.[124]

121 For the relationship of synderesis and the Decalogue, see our considerations in Chapter Four of this research under the topic: *Contents of Synderesis*.
122 *ST*, I–II, q. 100, a. 3: "Inter praecepta ergo Decalogi non computantur duo genera praeceptorum, illa scilicet quae sunt prima et communia, quorum non oportet aliam editionem esse nisi quod sunt scripta in ratione naturali quasi per se nota, sicut quod nulli debet homo malefacere, et alia huiusmodi; et iterum illa quae per diligentem inquisitionem sapientum inveniuntur rationi convenire, haec enim proveniunt a deo ad populum mediante disciplina sapientum."
123 *ST*, I–II, q. 94, a. 4: "Apud omnes enim hoc rectum est et verum, ut secundum rationem agatur. Ex hoc autem principio sequitur quasi conclusio propria, quod deposita sint reddenda."
124 *ST*, I–II, q. 100, a. 11: "Sed praecepta moralia ex ipso dictamine naturalis rationis efficaciam habent, etiam si nunquam in lege statuantur. Horum autem triplex est gradus. Nam quaedam sunt certissima, et a deo manifesta quod editione non indigent; sicut mandata de dilectione dei et proximi, et alia huiusmodi, ... quae sunt quasi fines praeceptorum, unde in eis nullus potest errare secundum iudicium rationis."

The preceding illustrates that, for Aquinas, moral precepts are efficacious derivations from the natural reason, which are recapitulated in the principle of the good, in synderesis. Although some tenets are included in the Decalogue, they are self-evident. Using the love of God and love of neighbour to substantiate his assertion is another way of saying that even if this precept appertains to the Law, it is natural for man to know it through reason because love is natural in man. By this means, Aquinas establishes that love of the neighbour is self-evident to all either by nature or by faith.[125]

The foregoing examples are evidently analogous in their character of *per se nota quoad nos* and their related emphasis on the good with the supreme as the articulation of the good itself. Aquinas, in the last paragraph of our sample text, portrays his interest in the general good whose violation is a direct opposition, evil. Hence, he stresses:

> Since, however, good has the nature of an end, and evil, the nature of a contrary, hence it is that all those things to which man has a natural inclination, are naturally apprehended by reason as being good, and consequently as objects of pursuit, and their contraries as evil, and objects of avoidance.[126]

The Angelic Doctor significantly shows in the preceding that everyone's natural basic preference is the good. Accordingly, he as the wise person shows why the good has the nature of an end and evil the contrary. Hence, he establishes that evil is not only the contradiction of the good but also a contrast of the appropriate human nature. This is to say by way of implication that evil is a moral disorder of human acts. Good is the basic concept known by all and which everyone seeks

125 See *ST*, I–II, q. 100, a. 3, ad 1: "Illa duo praecepta sunt prima et communia praecepta legis naturae, quae sunt per se nota rationi humanae, vel per naturam vel per fidem. Et ideo omnia praecepta Decalogi ad illa duo referuntur sicut conclusiones ad principia communia." See also K. L. Flannery, *Acts Amid Precepts*, 43. See also G. G. Grisez, "The First Principle of Practical Reason, ..." 172. However, Grisez thinks that the precept "God should he loved above all," is a precept that is not self-evident to all but that it is "objectively self-evident." Thus he asserts: "Man can be ignorant of these precepts because God does not fall within our grasp so that the grounds of his lovability and authority are evident to everybody." Consequently, for him, this precept would not be part of the generally known precepts. Nonetheless, there can be some rational truths as to the existence of God, which are naturally knowable with some natural inquisition of reason, presupposing the knowledge of what is ontologically immediate. See J. J. Sanguineti, "Los principios de la racionalidad en Santo Tomás," 109–137, 135.

126 *ST*, I–II, q. 94, a. 2: "Quia vero bonum habet rationem finis, malum autem rationem contrarii, inde est quod omnia illa ad quae homo habet naturalem inclinationem, ratio naturaliter apprehendit ut bona, et per consequens ut opere prosequenda, et contraria eorum ut mala et vitanda."



in the practical order. Thus, Aquinas establishes the good as the rational natural choice of every human person:

> Thirdly, there is in man an inclination to good, according to the nature of his reason, which nature is proper to him: thus man has a natural inclination to know the truth about God, and to live in society: and in this respect, whatever pertains to this inclination belongs to the natural law; for instance, to shun ignorance, to avoid offending those among whom one has to live, and other such things regarding the above inclination.[127]

Furthermore, Aquinas explains that the two types of self-evident principles are contents of the Decalogue. According to Aquinas, the first self-evident principles *quoad nos* are its contents as "principles in their proximate conclusions," whereas *per se notae solis sapientibus* are its contents "as conclusions in their principles." And so, he submits:

> Nevertheless both kinds of precepts are contained in the precepts of the Decalogue; yet in different ways. For the first general principles are contained in them, as principles in their proximate conclusions; while those which are known through wise men are contained, conversely, as conclusions in their principles.[128]

We have just read that Aquinas confirms his notion about the known *per se quoad nos* in the practical realm. As the Angelic Doctor well depicted above, the wise man always has the role of interpretation. In the first instance, although the good is generally known by the human mind as something worthwhile for all, the wise man interprets further that it is the exemplar, the right end and the highest thing that everyone seeks. The 'wise man' as an agent of understanding, indicates also the relationship of the first practical principle to all other self-evident practical principles and why it is naturally apprehended by any reasonable person. Moreover, the 'wise man' decodes other self-evident principles through his/her expertise and brings the rest of humanity to understand the meaning of the other self-evident principles. Aquinas attributes a prominent place to the 'wise man' because with his proficiency

127 *ST*, I–II, q. 94, a. 2: "Tertio modo inest homini inclinatio ad bonum secundum naturam rationis, quae est sibi propria, sicut homo habet naturalem inclinationem ad hoc quod veritatem cognoscat de deo, et ad hoc quod in societate vivat. Et secundum hoc, ad legem naturalem pertinent ea quae ad huiusmodi inclinationem spectant, utpote quod homo ignorantiam vitet, quod alios non offendat cum quibus debet conversari, et cetera huiusmodi quae ad hoc spectant."

128 *ST*, I–II, q. 100, a. 3: "Utraque tamen horum praeceptorum continentur in praeceptis Decalogi, sed diversimode. Nam illa quae sunt prima et communia, continentur in eis sicut principia in conclusionibus proximis, illa vero quae per sapientes cognoscuntur, continentur in eis, e converso, sicut conclusiones in principiis."

in knowledge he is privileged to the information which the majority do not have. The 'wise man' in this context does not imply the scientific 'wise man' (the expert in some particular field), but the wise in the sense of classical 'wisdom'.

*An Epigrammatic Appraisal of the Practical Field*: in view of the preceding reflections, it is obvious, as we mentioned in our previous chapter, that the aspect of actions, unlike the speculative aspect, is more probabilistic and approximative when reaching singularity. The analysis in the practical-practical area is not as sharp and clear-cut as the theoretical or in the mere practical area. Even in Aquinas' enunciations, one can easily observe this fact of less (limited) precision; as Aquinas observes, there is no precise mode of determining such. Hence, in determining matters of fact, the language is characteristically contingent, as Aquinas submits:

> The practical reason, on the other hand, is busied with contingent matters, about which human actions are concerned: and consequently, although there is necessity in the general principles, the more we descend to matters of detail, the more frequently we encounter defects. ... But as to the proper conclusions of the practical reason, neither is the truth or rectitude the same for all, nor, where it is the same, is it equally known by all.[129]

Therefore, we need the wise and the prudent agent to assist in the scientific interpretation of the good as it applies to all and daily endeavours.

### c. *A Concise Assessment of the Connaturality Debate*

In view of the foregoing, let us now briefly examine the two opposing hypotheses of Maritain and Grisez, which we highlighted above. We can articulate this problem as the dilemma of rationality and connaturality. Although it is not precisely our main inquiry, nonetheless, it touches on one of the core ingredients of our investigation, i.e. the self-evident principle of the good.

Maritain's basic submission is that the knowledge of the precepts of natural law is by inclination and not by reason. He explains that this knowledge of the natural law entails a non-conceptual knowledge, but one acquired by a connatural, congenial, inclinational understanding.[130] To Maritain's assumption, Grisez rightly responds that in Aquinas there is no presentation of the natural law in the form of object known or to be known, but that the precepts of practical reason are

129 *ST*, I–II, q. 94, a. 4: "Sed ratio practica negotiatur circa contingentia, in quibus sunt operationes humanae, et ideo, etsi in communibus sit aliqua necessitas, quanto magis ad propria descenditur, tanto magis invenitur defectus. ... Sed quantum ad proprias conclusiones rationis practicae, nec est eadem veritas seu rectitudo apud omnes; nec etiam apud quos est eadem, est aequaliter nota."

130 See J. Maritain, *Man and the State*, 84–94.



the natural law. Hence, the principles of the natural law are not unknown potential objects fully formed waiting to be discovered. Besides, he adds that Maritain forgets the reality about the precepts of the natural law, whereby they are considered as self-evident principles of practical reason. Grisez concludes with the observation that, in Aquinas, no such thing exists as non-conceptual intellectual knowledge.[131] As Aquinas says:

> As used of us, speaking signifies not merely understanding but understanding plus the expression from within oneself of some conception; and we cannot understand in any way other than by forming a conception of this sort. Therefore, properly speaking, every act of understanding is, in our case, an act of uttering.[132]

In our view, Maritain's assumptions in the cited work solicit much consideration. However, we shall articulate a few. Even though Grisez underscored what we may regard as crucial flaws in Maritain's proposals, we think it is necessary to closely examine parts of Maritain's submission. Maritain supposes that when Aquinas suggests that human reason discovers the regulations of natural law through the inclinational guidance of human nature, the Angelic Doctor implies that the very modality of human knowledge of natural law is not 'rational knowledge', but knowledge through 'inclination'.[133] In our understanding, the

131 See G. G. Grisez, "The First Principle of Practical Reason, ..." 172. In Grisez' own words, "Maritain suggests that natural law does not itself fall within the category of knowledge; he tries to give it a status independent of knowledge so that it can be the object of gradual discovery. He also claims that man's knowledge of natural law is not conceptual and rational, but instead is by inclination, connaturality, or congeniality. However Aquinas does not present natural law as if it were an object known or to be known; rather, he considers the precepts of practical reason themselves to be natural law. Thus the principles of the law of nature cannot be potential objects of knowledge, unknown but waiting in hiding, fully formed and ready for discovery. Moreover, the fact that the precepts of natural law are viewed as self-evident principles of practical reason excludes Maritain's account of our knowledge of them. For Aquinas, there is no non-conceptual intellectual knowledge."[See *ibid*, footnote: 172].

132 *De Ver*, q. 4, a. 2, ad 5: "In nobis dicere non solum significat intelligere, sed intelligere cum hoc quod est ex se exprimere aliquam conceptionem; nec aliter possumus intelligere, nisi huiusmodi conceptionem exprimendo; et ideo omne intelligere in nobis, proprie loquendo, est dicere."

133 See J. Maritain, *Man and the State*, 91–92. According to Maritain: "I think that Thomas Aquinas' teaching, here, should be understood in a much deeper and more precise fashion than is usual. When he says that human reason discovers the regulations of natural law through the guidance of the 'inclinations' of human nature, he means that the very mode or manner in which human reason knows natural law is not rational knowledge, but knowledge 'through inclination'. That kind of knowledge is not clear knowledge through concepts and conceptual judgments; it is obscure, unsystematic, vital knowledge by connaturality or congeniality, in which the intellect, in order to bear judgment, consults and listens to the inner melody that the vibrating strings of abiding tendencies make present in the subject." Further,

human person according to Aquinas is fundamentally rational. This characteristic distinguishes human beings from other primates. As we articulated in our previous two chapters, nothing is known in man without conceptualisation. By his first premise in the text we are considering, Aquinas first designates man basically as a rational being that apprehends reality through the rational mode. Accordingly Aquinas submits: "As 'being' is the first thing that falls under the apprehension simply, so 'good' is the first thing that falls under the apprehension of the practical reason, which is directed to action."[134] This implies, as we established earlier in Chapter Three, that any human knowledge involves a judgment (which is either direct or indirect, explicit or implicit judgment). Besides, even though the main element in the natural law is the principle of the good, as we indicated in Chapter Four, this knowledge is not an innate 'inclination' already developed; it is rather a habit (seed) of knowledge, which is basically a rational (conceptual) phenomenon. That the human person is inclined to he 'good' substantiates his possession of the rational inclination that induces the will into action. Although Maritain is right in identifying inclination, congeniality and connaturality, as parts of the propensities in man for the knowledge of the precepts of the natural law, especially about the fundamental principle, he loses out on an essential fact.

Furthermore, as Naus fittingly asserts, in Aquinas, although connatural knowledge is analogous, in the universal sense, it is knowledge in accord with nature.[135] This simply brings in the idea of its inseparability with reason, because any cognitive process in the human person is inseparable from the mind. Hence, Aquinas affirms that "to understand, it is necessary that those things that a man hears become, as it were, connatural to him because of their perfect impression on

on page 92, he submits: "With regard to the second basic element, the element of knowledge which natural law implies in order to have force of law, it thus can be said that natural law – that is, natural law *naturally known, or, more exactly, natural law the knowledge of which is embodied in the most general and most ancient heritage* of mankind-covers only the field of the ethical regulations of which men have become aware by virtue of knowledge 'through inclination', and which are 'basic principles' in moral life-progressively recognized from the most common principles to the more and more specific ones." Again on page 93–94, he suggests: "I just said on 'dynamic schemes' of moral regulations, such as can be obtained by the first, 'primitive' achievements of knowledge through inclination … first, as regards the way in which human reason has become aware in a less and less crepuscular, rough, and confused manner, of the primordial regulations of natural law; second, as regards the way in which it has become aware – always by means of knowledge through inclination – of its further, higher regulations."

134 *ST*, I–II, q. 94, a. 2.

135 See J. E. Naus, *The Nature of the Practical Intellect According to Saint Thomas Aquinas* (Roma: Libreria Editrice dell'Università Gregoriana, 1959), 142. For further reading on Aquinas' notion of connatural knowledge, see also *Ibid.* 143–150 and 168.



the intellect."[136] In the same way, the self-evident habit of the first principles that we underlined in Chapter Four, which is the principal constituent of the natural law, is *per modum naturae*.[137] When Aquinas speaks of connatural knowledge he means an inclination that promotes some special intellectual insight, that it includes both the appetite and the reason. He does not, therefore, exclude reason. Rather, he implies knowledge by inclination, constitutive of reason (immediate or mediate intellect).[138]

Consequently, we think that if the human person 'knows' anything in reality, it is because he is 'rational'. Nonetheless, Maritain goes further to substantiate his claims with quotes from Aquinas,[139] but the very passages he uses are not apart from rational justification and conceptual analysis about our knowledge. In addition, in one of his footnotes Maritain maintains that his opinion tallies with the real meaning implicit in Aquinas, even though the Angelic Doctor does not use the identical expression when treating of natural law. For Maritain, the issue has been somewhat obscured because of the Angelic Doctor's continuous comparison in those articles between the speculative and the practical intellect. He concludes that inclinational knowledge is generally understood in all Aquinas' teaching on natural law.[140] From our standpoint, as Grisez accented, Maritain overlooks the fact that the natural law constitutes self-evident principles. Moreover, if they are self-evident they will not be known only in a confused, obscure, and unsystematic way. So, for the human person to 'know' anything presupposes and implies rational knowledge. Let us now briefly consider God as *per se notum secundum se*.

136 *In VII Ethica*, lect. 3, n. 17: "… requiritur quod illa quae homo audit fiant ei quasi connaturalia, propter perfectam impressionem ipsorum intellectui." [Trans mine].

137 See *De Ver*, q. 17, a. 1, ad 6.

138 See J. E. Naus, *The Nature of the Practical Intellect According to Saint Thomas Aquinas*, 182.

139 See *ST*, I–II, q. 94, a. 2: "omnia illa ad quae homo habet naturalem inclinationem, ratio naturaliter apprehendit ut bona, et per consequens ut opere prosequenda, et contraria eorum ut mala et vitanda." See also *ST*, I–II, q. 94, a. 3: "Ad legem naturae pertinet omne illud ad quod homo inclinatur secundum suam naturam. *Unde cum anima rationalis sit propria forma hominis, naturalis inclinatio inest cuilibet homini ad hoc quod agat secundum rationem.* Et hoc est agere secundum virtutem. … Sed si loquamur de actibus virtuosis secundum seipsos, prout scilicet in propriis speciebus considerantur, sic non omnes actus virtuosi sunt de lege naturae. Multa enim secundum virtutem fiunt, ad quae natura non primo inclinat; sed per rationis inquisitionem ea homines adinvenerunt, quasi utilia ad bene vivendum." In his citation, Maritain does not include the part in cursive, which for us is part of the Thomistic articulation of the differentiation of any human knowledge. To know as such, is to act according to reason. It is through the rational soul, as we established earlier, that knowledge arises in the human person in any of its forms. For further reading on this, see J. Maritain, *Man and the State*, 91, footnote.

140 See J. Maritain, *Man and the State*, 91, footnote.

*d. A Glance at God as the Principle* Per se notum secundum se

Aquinas emphasises that God is *per se notum*,[141] but this attribute in God is the type we should classify as *par excellence* and according to the Angelic Doctor, it is *secundum se* not *quoad nos*. Just as every whole is greater that the part, so is God the totality of sublimity in regard to us. Subsequently, he is so unparalleled in his self-evidence that he defies our understanding.[142] As Aquinas appositely assumes, God's existence *per se* is the cause of all *per se* since he is like the light that illumines every other intelligible being. Without God as *per se notum*, we cannot know anything. Thus, Aquinas corroborates:

> [Again.] That whereby all things are known must needs be self-evident. Now such is God. For just as the light of the sun is the principle of all visual perception, so the divine light is the principle of all intellectual knowledge, because it is therein that first and foremost intellectual light is to be found. Therefore it must needs be self-evident that God is.[143]

According to the Angelic Doctor, we cannot know God's existence in his being (essence), we can only know him through effects. Considering this fact Aquinas submits:

> [As we have said above,] God is called infinite, because He is a form unlimited by matter; whereas in material things, the term 'infinite' is applied to that which is deprived of any formal term. And form being known in itself, whereas matter cannot be known without form, it follows that the material infinite is in itself unknowable. But the formal infinite, God, is of Himself known; but He is unknown to us by reason of our feeble intellect, which in its present state has a natural aptitude for material objects only. Therefore we cannot know God in our present life except through material effects.[144]

141 See *ST*, I, q. 2, a. 1: "Dico ergo quod haec propositio, deus est, quantum in se est, per se nota est, quia praedicatum est idem cum subiecto; deus enim est suum esse." See also *SCG* I, Ch. 10, n. 4: "Sic ergo cum dicitur, deus est, praedicatum vel est idem subiecto, vel saltem in definitione subiecti includitur. Et ita deum esse per se notum erit."

142 *SCG* I, Ch. 11, n. 1: "Nam simpliciter quidem deum esse per se notum est: cum hoc ipsum quod deus est, sit suum esse. Sed quia hoc ipsum quod deus est mente concipere non possumus, remanet ignotum quoad nos. Sicut omne totum sua parte maius esse, per se notum est simpliciter: ei autem qui rationem totius mente non conciperet, oporteret esse ignotum." See also *ST*, I, q. 12, a. 1, ad 2: "Sed infinitum quod se tenet ex parte formae non limitatae per materiam, est secundum se maxime notum. Sic autem deus est infinitus."

143 *SCG* I, Ch. 10, n. 6: "Item. Illud per se notum oportet esse quo omnia alia cognoscuntur. Deus autem huiusmodi est. Sicut enim lux solis principium est omnis visibilis perceptionis, ita divina lux omnis intelligibilis cognitionis principium est: cum sit in quo primum maxime lumen intelligibile invenitur. Oportet igitur quod deum esse per se notum sit."

144 *ST*, I, q. 86, a. 2, ad 1.



Aquinas explicates in *De Veritate* that, although perceptible things are more evident to us, we can know God from the viewpoint of seeing those things in him. Things are evident to us because of his self-evidence through the Word. Following this outlook, Aquinas suggests:

> That through which another thing is known is always more evident. Therefore, although according to a certain mode of knowing creatures are more evident to us than God, still, in the mode of knowledge in which things are seen in the Word, the Word itself is more evident than the things seen in the Word.[145]

Hence, the Angelic Doctor explains that by analogy we use the word 'to know' for God's essence. Aquinas describes the modality of our knowledge as obscure and confused knowledge. This apprehension of God is naturally rooted in us since God is our beatitude. And so, according to Aquinas:

> To know that God exists in a general and confused way is implanted in us by nature, inasmuch as God is man's beatitude. For man naturally desires happiness, and what is naturally desired by man must be naturally known to him. This, however, is not to know absolutely that God exists.[146]

Moreover, it is given to us to 'be' by way of participation in the fullness and perfection of 'being', God. As Aquinas commented, even the good we claim to have in us is from the perfect principle of the good i.e. the end of man's meaning and purpose.[147] Hence, our 'being good' is an approximation from the goodness, which God is in his essence.[148] Whereas these two aspects i.e. being and good, are separated in the human person, the opposite is the case in God. Aquinas clarifies

145 *De Ver*, q. 20, a. 5, ad 2.

146 *ST*, I, q. 2, a. 1, ad 1: "Ad primum ergo dicendum quod cognoscere deum esse in aliquo communi, sub quadam confusione, est nobis naturaliter insertum, inquantum scilicet deus est hominis beatitudo, homo enim naturaliter desiderat beatitudinem, et quod naturaliter desideratur ab homine, naturaliter cognoscitur ab eodem. Sed hoc non est simpliciter cognoscere deum esse."

147 See *In Boethii de Hebdomadibus* lect. 5: "Sed quia ipsum esse rerum creatarum non potest esse, nisi deriventur a primo bono, idcirco ipsum eorum esse bonum est; nec est tamen simile in bonitate primo bono: quia illud absolute est bonum, quomodocumque se habeat, quia nihil est in eo aliud nisi ipsa essentia bonitatis: et hoc ideo est, quia non est in eo perfectio per additionem, sed in suo simplici esse habet omnimodam perfectionem."

148 See *In Boethii de Hebdomadibus* lect. 5: "Inquantum scilicet non essent ex primo bono; cum tamen ipsum bonum primum sit et ipsum esse, quia eius esse est substantia sua; et ipsum bonum, quia est ipsa essentia bonitatis: et ipsum esse bonum, quia in eo non differt esse et quod est."

that since God is infinite *esse simpliciter*, these attributes are identical in him. Commenting on Boethius, therefore, the Angelic Doctor affirms that in God, *esse* and *agere* are an identity while in us they are distinct.[149] The goodness of God is parallel to his essence in human terms.

Subsequently, we do not know God's essence; we try to know him through causality or *reductio ad absurdum* from the perceptible reality.

### e. *Précis on the Principle of Love as* Per se nota quoad nos

The preceding inquiry on God as *per se notum* brings us to a brief examination of the notion of the precepts of love as *per se notum quoad nos*. According to our precedent finding, Aquinas relates that everyone naturally seeks happiness. Some identify this with riches; others, with reputation; and others, in pleasures, and so on.[150] Since God is man's beatitude despite each person's interpretation of the perfect good, all men seek God unawares, because their actual fulfilment is in him.[151] The moral necessity of loving God above all and our neighbour is in someway a self-evident precept for all. It will become self-evident only by presupposing some moderate but rightful use of our natural reason, in accordance with our natural inclination.[152] According to Aquinas, the human person with his *ratio naturalis* judges immediately that certain specific things should be done or avoided.[153] In this way the light of the principle of the 'good' consents that some of its determinations become evidently known simply by a moderate consideration (*modica consideratione*), with a minimal natural reflection.[154]

Nonetheless, as Brock rightly suggests, there is an enigmatic interplay in Aquinas' claim that the duty of loving God is *per se notum quoad nos* whereas his existence is not.[155] Obviously, by the former assumption, the Angelic Doctor does not imply that there cannot be error at all about this precept of the love of God, but just that no one can err about it following rational judgment. This further indicates, although it is hard to grapple with, that whereas Aquinas does not consider it likely that anyone should directly opt not to desire and seek happiness, he considers that people's options can be at odds with *amor naturalis* of God. In the state of his 'corrupt nature,' after the fall, man separates from this love of God

149 See *In Boethii de Hebdomadibus* lect. 5: "In deo autem idem est esse quod agere; unde in ipso idem est bonum esse quod iustum esse. Sed nobis non est idem esse quod agere quia deficimus a simplicitate dei: unde nobis non est idem esse bonos et iustos, sed esse convenit nobis omnibus inquantum sumus, et ideo etiam bonitas omnibus nobis convenit."

150 See *ST*, I, q. 2, a. 1, ad 1.

151 See K. L. Flannery, *Acts Amid Precepts*, 44.

152 See J. J. Sanguineti, "El conocimiento personal de los primeros principios," 723.

153 See *ST*, I–II, q. 100, a. 1.

154 See *ST*, I–II, q. 100, a. 3.

155 See S. L. Brock, "Can Atheism be Rational? A Reading of Thomas Aquinas," in *Acta Philosophica* 11 (2002), 215–238, 221–223.



above all things only "in the appetite of his rational will."[156] Thus, man is affected not according to his fundamental nature, *voluntas ut natura*, but according to his rational will, *voluntas ut ratio*. Consequently, the rational will is the only aspect that can be withdrawn from the love of God with the consequent violation of the natural law, but not the entirety of the human person. Besides, as Brock appositely affirms, Aquinas maintains that the natural precept of the love of God above all includes the *amor amicitiae*.[157] There is an inherent addition to the love of God as the object of man's happiness.[158] While the former shows the love of God as the reason for the existence of man and his ultimate fulfilment, the addition, so to say, is the love of God as the source of man's own maximum contentment.[159] This exposé of Brock is an amplification of our reference to the Angelic Doctor's foregoing *modica consideratione*.

As we established above, to know and to love are inherent in the nature of man. This view is also reflected in Cruz Cruz' suggestion that love and knowledge, in a radical sense of underlying attitude of the will, are always in unity, because naturally the human person appreciates in its goodness what is already known, and what is appreciated is also known.[160] However, at the level of the first principles, this happens in a peculiar way, since there is a correspondence between the original cognitive condition (within the structural unit of the 'world-self-others') and the will in the cognitive circumstance of these goods. Aquinas regards these goods as *voluntas ut natura*.[161] This parallel is a fundamental unity and should be taken as such; in this way, all is resolved in the original human condition in front of 'being', 'truth' and 'goodness' in the threefold dimensions of human self-giving. As Sanguineti suggests, we are originally made to understand and love in these three modes (the world-self-others). Hence, we naturally love since human praxis finds its deepest source and meaning in this innate tendency of the *voluntas ut natura* or natural love (*amor naturalis*) as derived from the original knowledge of the principles. In view of this fact, human freedom is not an indifferent one.[162] Our will is fundamentally oriented towards love of goodness in the three dimensions (the self, the world, and others) and, necessarily, finally arrives at (is resolved in) the plenitude of sapiential love, God. Therefore, a closure on the pretext of 'pure speculation' is not possible because, as Cruz Cruz affirms, contemplation implies always knowledge and love.[163] The human will is drawn to love 'being' as it presents itself as 'good'

156 *ST*, I–II, q. 109, a. 3: "Secundum appetitum voluntatis rationalis."

157 See *ST*, I, q. 60, a. 5.

158 See *ST*, I–II, q. 2, a. 7, ad 2.

159 See S. L. Brock, "Can Atheism be Rational? …," 220–221.

160 See J. Cruz Cruz, *Ontología del amor en Tomás de Aquino* (Pamplona: EUNSA, 1996), 80–89.

161 See *ST*, III, q. 18, a. 4.

162 See J. J. Sanguineti, "El conocimiento personal de los primeros principios," 725.

163 See J. Cruz Cruz, *Intelecto y razón: las coordenadas del pensamiento clásico* (Pamplona: EUNSA, 1998), 285–286.

and desirable. This incites the mind always towards action (to 'do something'), which involves our freedom, so as to arrive at the fullness of 'goodness'. This desire for (force of) action stems from *amor naturalis* and tends to completeness. Thus, it cannot imply a mere technical 'doing'. Since the basic human constitution originally is metaphysical and ethical, it necessitates a holistic active endeavour to love.[164]

Nonetheless, this *amor naturalis* occurs differently in regards to God. Along with these inborn quests (about knowledge and love), there is the desire to discover the source of our being and to devote to it our whole life. In this complexity, there is an immediate leap in man's search by associating the things we know to the original source, the *esse simpliciter*,[165] which we cannot comprehend in our finite material way. From such inherent quality of man, stems our rational desire to love God in our modalities and with our maxims. However, even the grasp of this precept as a self-evident precept is dependent on the principle of the transcendental good, because it is for us a determinate sort of the good.[166] Hence, as McInerny affirms, the grasp of some other self-evident principles (precepts) derives essentially from the grasp of the very first principle, i.e. the transcendental good. This is to say that self-evidence does not imply absolute independence and the absence of presuppositions and the like.[167]

Again concerning the love of neighbour, Aquinas similarly sustains that fundamentally to love one's neighbour is to love God. According to the Angelic Doctor:

> ... the aspect under which our neighbor is to be loved, is God, since what we ought to love in our neighbor is that he may be in God. Hence it is clear that it is specifically the same act whereby we love God, and whereby we love our neighbor. Consequently the habit of charity extends not only to the love of God, but also to the love of our neighbor.[168]

Subsequently, Aquinas shows that it is in precisely the same act of our love for God that we love our neighbour. Further, Flannery thinks that there is a rationale behind this Thomistic option, because the love of neighbour is the basic assumption of many more particular moral precepts, such as: do not kill, do not steal, and

164 See J. J. Sanguineti, "El conocimiento personal de los primeros principios," 725.
165 See R. McInerny, *Boethius and Aquinas*, 230–231.
166 See K. L. Flannery, *Acts Amid Precepts*, 44.
167 See R. McInerny, "Precepts of Natural Law as *Per Se Nota*," in R. Alvira Domínguez; A. J. G. Sison, eds. *El hombre: immanencia y trascendencia: actas de las XXV Reuniones filosóficas de la Universidad de Navarra* vol. I (Pamplona: Servicio de Publicaciones de la Universidad de Navarra, 1991), 479–495, 490–491.
168 *ST*, I–II, q. 25, a. 1: "Ratio autem diligendi proximum deus est, hoc enim debemus in proximo diligere, ut in deo sit. Unde manifestum est quod idem specie actus est quo diligitur deus, et quo diligitur proximus. Et propter hoc habitus caritatis non solum se extendit ad dilectionem dei, sed etiam ad dilectionem proximi."



so on.[169] Consequently, Aquinas shows that the *ratio* of the love of God justifies our love of neighbour, since we are to desire that every other person should be in God. In this way, the Angelic Doctor establishes that both precepts are *per se notum quoad nos* under one aspect of the principle of the good.

### *f. An Evaluative Résumé*

On a close observation one perceives a linear flow of arguments between the *per se notum* and the principles in Aquinas' conception. There is also a certain cyclic affinity in the relationship between them. One could suggest that the principles are the *per se nota* of diverse categories but not conversely. Although not stated, apparently Aquinas' approach to the *per se notum* is parallel to his methodology about the principles. In one of the Thomistic citations above, Aquinas explains that "whatever is predicated *per se* is predicated universally [i.e., of all], ... whatever is predicated 'first' is predicated *per se*."[170] Through these universal predications, what is known *per se* is derived (classified). The 'first' corresponds to the principles because they are *archai* in Aristotelian conception, which correspond to *principia prima* (the first principles) in Aquinas.

The essential factor to grasp about this discourse is that, when Aquinas investigates the self-evident principles of speculative and the practical realms, he does not denote tautologies simply derived by conceptual analysis. Rather, he implies the theoretical and practical principles applicable to all aspects of scientific analysis and practical inquiry respectively, of which the latter are also the limits of a pragmatic line of reasoning. The Thomistic employment of the self-evident principles functions as a set of underivable principles for both the theoretical and practical reason.[171] To properly function as self-evident principles, as Grisez suggests, their position as underivables must be acknowledged. Moreover, this acknowledgement is largely dependent on an adequate grasp of the terms of these principles, the intelligible significations of those terms.[172]

Just as the *principia* are two-fold according to Aquinas' usage, i.e. the general principles and the specific or specialised principles of different levels, fields, and disciplines, so also is the Thomistic notion of the *per se nota*. This implies that all the principles in the realistic order starting with the theoretical sphere are

169 See K. L. Flannery, *Acts Amid Precepts*, 45.
170 *In I APst*, lect. 9, n. 3 (73a 25): "Oportet enim in propositionibus demonstrationis aliquid universaliter praedicari, quod significat dici de omni, et per se, et etiam primo, quod significat universale. Haec autem tria se habent ex additione ad invicem. Nam omne quod per se praedicatur, etiam universaliter praedicatur; sed non e converso. Similiter omne quod primo praedicatur, praedicatur per se, sed non convertitur. Unde etiam apparet ratio ordinis istorum."
171 See G. G. Grisez, "The First Principle of Practical Reason, ..." 174.
172 See G. G. Grisez, "The First Principle of Practical Reason, ..." 174–175.

*per se nota*[173] whether *secundum se* or *quoad nos*. In summary, the principles are invariably *per se nota* because they are self-evident beginnings and maxims in every realistic scientific endeavour.

## C. Truth, the Self-Evident and Rational Judgment

### *C.1.1 Truth, Intelligibility and the Self-Evident*

In any self-evident principle, the objective element that justifies it as realistic is truth. Truth, as we underscored earlier in Chapter Three,[174] is an inclusive notion. It ranges from the metaphysical attribute as *per se notum secundum se*, as an attribute of *ens* through logical truth, and various other dimensions. As an *adaequatio rei*, nothing can be self-evident without being automatically true. Hence, before the first principles can be known, they are inherently and necessarily true (ontological truth). This implies that the reason for the truth of the self-evident principles is what they directly indicate, and not any causal extrinsic feature. In other words, the first principles are *per se nota* if they are holistically objective in their intelligibility. This implies that the truth about the self-evident principles is expressed through their intelligibility. What do we mean by intelligibility?

Intelligibility, as Grisez asserts, is all the implication of a word if used accurately when things that bear on that usage are fully known in every mode relevant to the aspect that is signified by the used word.[175] Hence, intelligibility comprises the connotation with which a word is used; nevertheless, it also encompasses whatever extension of implication the same word would have in an identical use, if the meaning of the word were more perfectly known. Besides, there is no need for correspondence of intelligibility with any part or principle of the object of knowledge; still it suffices to say that intelligibility is an aspect of the partially known and the potentially knowable. This means that intelligibility is an all-inclusive word that takes in all implications of the word immediate, proximate, and prospective. In Grisez' view, we could visualise intelligibility as an intellect-sized piece of reality, a bite that is not necessarily entirely assimilated by the mind.[176]

Intelligibility has a 'holistic' import in that it includes the exact connotation and potential signification of a word articulated by human intelligence in relation

173 See *In II Sent*, d. 39, q. 3, a. 2: "Prima principia, ... sunt per se nota." See also *In II Sent*, d. 24, q. 2, a. 3.
174 For further details on the notion of truth as *adaequatio rei*, see our discourse on *Sensory Knowledge and Truth* and *A Synopsis on Verum and Bonum as Transcendentals*.
175 See G. G. Grisez, "The First Principle of Practical Reason, ..." 174.
176 See G. G. Grisez, "The First Principle of Practical Reason, ..." 174.



to reality itself which is naturally suitable to our mind constructs. This means that we do not imply intelligibilities for a word. As Grisez suggests, we make the distinctions and unifications in the processes of analysis and synthesis; these comprise our rational knowledge.[177] Consequently, it is possible that an aspect of an intelligibility could escape us without our falling short of the whole reality. In view of the foregoing, how do we justify the principles as self-evident? How do we relate intelligibility to the self-evident principles?

On the part of the self-evident principle, there are two-fold aspects of self-evidence. From one perspective, a principle cannot be self-evident if it is derivable from other prior principles that could provide its basis. From another viewpoint, a principle is worthless and meaningless as the beginning of an inquiry and as a limit of verification unless its underivability is recognised. As Grisez asserts, the non-existence of a middle term as a connection between the subject and predicate of the principle in order to provide the reason for its truth determines the objective aspect of the principle's self-evidence, i.e. its underivability. The direct signification of the principle is the reason for the truth of its self-evidence.[178] Since the self-evident principle lacks an extrinsic cause for its verity, its truth is inherent in it. In addition, as Grisez appends, an acknowledgement of the principle's underivability, which is the subjective aspect of self-evidence, demands that the subject possesses a sufficient understanding of the principle's meaning so that no mistaken attempts can be made for the provision of a derivation for the principle.[179]

To understand the relationship between the self-evident principles and the notion of intelligibility, we need to reaffirm that first principles are wholly intelligible. This explains the reason for the mind's understanding and use of them as principles for other aspects of scientific knowledge. If the principles were not fully intelligible, the mind would not have properly grasped them as self-evident truth-value judgments. In line with Aquinas, we think that the objective feature of *per se notum* is that the predicate of a self-evident principle appertains to the intelligibility of the subject.[180] In the same vein, with the Angelic Doctor we establish that the subjective aspect of the *per se notum* is determined by the fact that this intelligibility is evidently known.[181] These comments need careful attention to grasp their real implication in the philosophy of Aquinas, unlike some modern philosophies where analytic truths are divergent from synthetic truths. In that context only truths of reason, which are analytic truths, are regarded as necessary truths. However, their necessity is accredited to meaning considered as inherent

177 See G. G. Grisez, "The First Principle of Practical Reason, ..." 174.
178 See G. G. Grisez, "The First Principle of Practical Reason, ..." 173.
179 See G. G. Grisez, "The First Principle of Practical Reason, ..." 173.
180 See *ST*, I-II, q. 94, a. 2: "Quidem quaelibet propositio dicitur per se nota, cuius praedicatum est de ratione subiecti."
181 See *ST*, I-II, q. 94, a. 2.

ideas in the mind. Truths of fact, i.e. synthetic truths, on the other hand, are speculated as having reference to actualities. Nevertheless, as Grisez observes, truths of fact are considered as contingent because all necessity is characterised to be rational.[182] To which kind of truth does the foregoing Thomistic elucidation on self-evident principles refer?

The self-evident principles in Aquinas' realistic perspective do not admit of separation. Of course this sort of split in the modern mentality is such that the mind and matter are mutually distinct. The Thomistic approach is neither synthetic nor analytic according to the modern understanding. Rather, it can be viewed to be a combination of both the analytic and synthetic truths. Aquinas acclaims truth as *adaequatio intellectus et rei*.[183] Unlike Kant, for instance, in his synthetic *a priori* innovation, Aquinas realistically supposes that the *per se nota* principles convey real meanings. These connotations are derived from the things known and experienced as they are. This implies that things in reality possess intelligibility in themselves that lends them to be perceived as they are so that in knowing them, one is simultaneously acknowledging the integral truth about them. Hence, Aquinas' assumption that the "predicate is contained in the notion of the subject"[184] does not simply imply that an element of a complex connotation is contained within others in that composite. Instead, for Aquinas, as Grisez suggests, the subject and the predicate are complementary features of a unified knowledge, wherein the unified knowledge is a specific objective aspect of the known reality.[185] Subsequently, Aquinas articulates that the true knowledge of *per se nota* principles is grounded in real ontological meaning, which the mind draws immediately through the intelligibility of the actual objects.[186]

In Aquinas, therefore, the mind assents to truth in two ways. In one dimension the mind apprehends the truth of the object naturally and in the other, the mind assents to the truth it apprehends. Accordingly, Aquinas affirms:

> But we must take note that the act of the reason may be considered in two ways. First, as to the exercise of the act. ... Secondly, as to the object, in respect of which two acts of the reason have to be noticed. One is the act whereby it apprehends the truth about something. This act is not in our power: because it happens in virtue of a natural or supernatural light. Consequently in this respect, the act of the reason is not in our power, and cannot be commanded. The other act of the reason is that whereby it assents to what it apprehends. If, therefore, that which the reason apprehends is such that it naturally assents thereto, e.g. the first principles, it is not in our power to assent or dissent to the like: assent follows naturally, and consequently, properly speaking, is not subject to our command.[187]

182 See G. G. Grisez, "The First Principle of Practical Reason, ..." 173.
183 *ST*, I, q. 16, a. 1; See *SCG* I, Ch. 59, n. 2; See also *De Ver*, q. 1, a. 1; etc.
184 See *ST*, I-II, q. 94, a. 2.
185 See G. G. Grisez, "The First Principle of Practical Reason, ..." 173.
186 See *De Ver*, q. 14, a. 1. See also A. Llano, *Filosofia della conoscenza*, V. Ascheri, 2nd ed. riv. e ampl. (Roma: EDUSC, 2011), 61.



From the preceding Thomistic excerpt, we hold that the mind apprehends truths, such as the self-evident principles, by natural assent, which confirms our precedent assumption about truth in Aquinas. Further, as Llano observes, the assent is part of the reflexive dimension of truth. Sometimes this dimension is inevitable, as when the proposition is self-evident as in the case of first principles. The various ways in which assent can be given in relation to propositional content directly result in the different states of mind in relation to the truth: certainty, doubt, opinion and faith.[188] In the case of the self-evident principles, the assent is necessarily and inherently adapted to truth in the form of certitude. However, there is error when the mind assents to a proposition that does not conform to reality. Consequently, truth in the object, as in the self-evident principles, commands our natural apprehension and assent because of their intrinsic intelligibility.

### *C.1.2 A Quick Look at Necessity and Intelligibility*

Intelligibility is expressed both by the self-evident principles and the *per se* propositions of diverse forms. The intelligible, as Aquinas suggests, is necessary and incorruptible because in the human modality, the necessary things are perfectly knowable by the intellect. On the other hand, the contingent things are knowable by the human intellect defectively. Accordingly, Aquinas affirms:

> Now the intelligible, as such, is necessary and incorruptible, for necessary things are perfectly knowable by the intellect: whereas contingent things, as such, are only deficiently knowable, because about them we have not science but opinion, so that the intellect has science about corruptibles in so far as they are incorruptible, that is, according as they are universal.[189]

187 *ST*, I–II, q. 17, a. 6: "Sed attendendum est quod actus rationis potest considerari dupliciter. Uno modo, quantum ad exercitium actus. ... Alio modo, quantum ad obiectum, respectu cuius, duo actus rationis attenduntur. Primo quidem, ut veritatem circa aliquid apprehendat. Et hoc non est in potestate nostra, hoc enim contingit per virtutem alicuius luminis, vel naturalis vel supernaturalis. Et ideo quantum ad hoc, actus rationis non est in potestate nostra, nec imperari potest. Alius autem actus rationis est, dum his quae apprehendit assentit. Si igitur fuerint talia apprehensa, quibus naturaliter intellectus assentiat, sicut prima principia, assensus talium vel dissensus non est in potestate nostra, sed in ordine naturae, et ideo, proprie loquendo, nec imperio subiacet."
188 See A. Llano, *Filosofia della conoscenza*, 59–60.
189 *SCG*, II, Ch. 55, n. 11: "Intelligibile autem, inquantum est intelligibile, est necessarium et incorruptibile: necessaria enim perfecte sunt intellectu cognoscibilia; contingentia vero,

As Aquinas reflected above, the intellect knows the corruptible things through their incorruptibility because of their universal intelligibility. The understanding of the first principles (*intellectus principiorum*) expresses this necessity of intelligibility maximally because of their instant and perfect knowableness by the intellect. The *per se* propositions fall under this category since they are necessary truths. As Hoenen proposes, as it is implicit in the preceding Aquinas' extract, the intelligible involves not only that which is precise to the understanding of principles (*intellectus principiorum*) as far as it is distinct from science in the strict sense, as distinguished from the knowledge of conclusions (*scientia conclusionum*). If that were the case, only the first principles would be attributed with intelligibility. However, apposite conclusions drawn from accurate reasoning through necessary premises have intelligibility.[190] This implies as we earlier articulated that the mind knows the intelligible mainly in two ways: namely, through direct intuition and through reasoning (*intellectus et ratio* respectively).[191]

The first is an intellectual synthesis and the second is a rational analysis that concludes (or is reduced) invariably in the intellectual synthesis. Consequently, both the self-evident first principles and the conclusions contain intelligible truth. The principal difference is only in the human being's mode of attainment of this truth (*modus cognoscendi*). Thus, in line with Aquinas, Hoenen affirms that after the process of reasoning itself, the mind arrives at this 'rest' with the intuition of the intelligible truth. This is particularly if, after the finding of the middle terms, the 'movement' has concluded in a critical resolution of the truth to first principles. As a result, we can obtain at a glance the entire series of intermediary associations so that our knowledge of the truth progresses to an intuition.[192] Since the *intellectus* is the point of resolution, in both ways, it assumes an optimal status in our definition and analyses, as we shall also come back to shortly.

inquantum huiusmodi, non nisi deficienter; habetur enim de eis non scientia, sed opinio; unde et corruptibilium intellectus scientiam habet secundum quod sunt incorruptibilia, inquantum scilicet sunt universalia."

190 See P. Hoenen, *Reality and Judgment According to St. Thomas*, 124.

191 See *ST*, I–II, q. 5, a. 1, ad 1: "Intellectualis natura excedit rationalem quantum ad modum cognoscendi eandem intelligibilem veritatem, nam intellectualis natura statim apprehendit veritatem, ad quam rationalis natura per inquisitionem rationis pertingit." See also *ST*, I, q. 79, a. 8.

192 See P. Hoenen, *Reality and Judgment According to St. Thomas*, 125. See *SCG*, I, Ch. 57, n. 2: "Tunc enim ratiocinativa est nostra consideratio quando ab uno considerato in aliud transimus, sicut syllogizando a principiis in conclusiones. Non enim ex hoc aliquis ratiocinatur vel discurrit quod inspicit qualiter conclusio ex praemissis sequatur, simul utrumque considerans: hoc enim contingit non argumentando, sed argumenta iudicando; sicut nec cognitio materialis est ex hoc quod materialia diiudicat."



### *C.1.3 A View on the Mind's* Resolutio

We consider it necessary at this point to underscore the application of the first Thomistic principles, especially the fundamental ontological principles that coincide with the epistemological principles. In order to grasp the actual nature of their functionality, we note, as we accentuated in Chapter Two, that first principles or axioms are remote guides to any realistic inquiry. These first principles act as a habitual light that leads to truth and to the avoidance of error in an investigation. For instance, they can move one to keep away from contradictions or to investigate appropriate causes, as premises of explicit reasoning. Aquinas, on his part, employs a wide range of principles for resolving particular problems that emerged in the context of a specific investigation. Such principles that we have previously underlined recur often in Thomistic works.[193]

Only the principles/axioms are completely certain in regard to any human being, and Aristotle mentions only the PNC and a few others with a mathematical character, such as fundamental principles relating to the whole and part and to equality, etc. As Sanguineti affirms, the rest, such as the principles of causality – that which moves, is moved by another – are not mentioned as examples of the *dignitates* in either Aristotle or Aquinas.[194] Nonetheless, they can be considered as indemonstrable principles that are known inductively once an adequate elaboration is made of the value of their intelligible terms. Since our purpose in this part is to discover the *resolutio* of the principles, we shall not bother with individual principles. As we have already delved into a fair detail with many of the principles, we assume that there is enough footing for this aspect of our inquiry. How then do we find the *resolutio* in the first principles from the realistic model?

Without referring to the specific contents of the principles, we noted earlier that according to Aquinas the rational movement necessarily proceeds from the first principles to arrive at conclusions. At the peak of these first principles is the *intellectus principiorum*. In Aquinas, to accomplish this rational movement, the mind uses its powers of the intellect and rationality. The Angelic Doctor uses the words *inventio* and *iudicium* on the one hand, and *resolutio* and *compositio*, on the other. Accordingly, Aquinas submits:

> [And since] movement always proceeds from something immovable, and ends in something at rest; hence it is that human reasoning, by way of inquiry and discovery, advances from certain things simply understood – namely, the first principles; and, again, by way of judgment returns by

193 For more details on the functionality of the principles, see Chapter Two of this research on: *The Role of the Principles in Thomistic Philosophy*. For recurrent principles in Aquinas, see also Chapter Two on the argument: *Recurrent Principles in the Works of Thomas Aquinas*.

194 See J. J. Sanguineti, "Los principios de la racionalidad en Santo Tomás," 109–137, 124–125.

> analysis to first principles, in the light of which it examines what it has found.[195]

About the latter, Aquinas affirms:

> Therefore, when a perfect whole is resolved (*resolutio*) into its parts, there is motion in a sense from form to matter; and in a similar way when parts are combined, there is an opposite motion from matter to form. Hence the preposition from, which designates a beginning (*principium*), applies to both processes: both to the process of composition (*compositio*), because it signifies a material principle, and to that of resolution (*resolutio*), because it signifies a formal principle.[196]

Via *inventionis*,[197] after the formation of inductive principles, in order to deduce conclusions, is the application of the light of these principles to certain specific matters which are discovered. This via *inventionis* is synthetic or compositional, in that it proceeds from the simplicity of the principles to the multiplicity of conclusions. The *iudicium* implies exactly an inverse movement, which involves an analytical method whereby reason confirms conclusions by judging them in the light of the principles. This process consists in the *resolutio* (analysis) of the manifold in the unity of the simple. Hence, Aquinas affirms that the effects of a certain judgment can be obtained only by analysis in the first principles. Therefore, this is the analytical part, that is, *resolutoria* (analytic).[198]

There could be a situation where the conclusions are already known through another source of knowledge (for instance, given as credible matter, as sensible data, or as general opinion). However, in such instances, as soon as the conclusion is certain by the confirmation of a principle, the notion rises to be part in the construction of knowledge, because it becomes a *res scita* (a thing known), a knowable *res* that participates in the original noetic light.

195 *ST*, I, q. 79, a. 8: "Et quia motus semper ab immobili procedit, et ad aliquid quietum terminatur; inde est quod ratiocinatio humana, secundum viam inquisitionis vel inventionis, procedit a quibusdam simpliciter intellectis, quae sunt prima principia; et rursus, in via iudicii, resolvendo redit ad prima principia, ad quae inventa examinat."

196 *In V Metaph*, lect. 21: "Quando igitur ex toto perfecto fit resolutio partium, est motus quasi a forma ad materiam; sicut e converso, quando partes componuntur, est motus a materia in formam. Et ideo haec praepositio ex quae principium designat, utrobique competit: et in via compositionis, quia determinat principium materiale; et in via resolutionis, quia significat principium formale." [Trans mine].

197 *De Malo*, q. 6, Prologus, co: "Sicut enim homo secundum intellectum in via inventionis movet se ipsum ad scientiam, in quantum ex uno noto in actu venit in aliquid ignotum, quod erat solum in potentia notum."

198 See *In I APst*, lect. 1, n. 6: "Et quia iudicium certum de effectibus haberi non potest nisi resolvendo in prima principia, ideo pars haec analytica vocatur, idest resolutoria."



The Angelic Doctor articulates in *resolutio* the peak of the mind's judgment, since it is by consideration through analysis that the mind arrives at the first principles, which forms a circular movement but, simultaneously, a formidable judgment. For Aquinas, *resolutio* is the actual complete thought process, since through it proper/right reasoning can be employed to check mistakes. According to Aquinas:

> Now just as research belongs to the reason, so judgment belongs to the intellect. Wherefore in speculative matters a demonstrative science is said to exercise judgment, in so far as it judges the truth of the results of research by tracing those results back to the first indemonstrable principles. Hence thought pertains chiefly to judgment; and consequently the lack of right judgment belongs to the vice of thoughtlessness, in so far, to wit, as one fails to judge rightly through contempt or neglect of those things on which a right judgment depends.[199]

In line with the above, Aquinas confirms that: "Our intellect can err about conclusions, before tracing them back to first principles. When this has been done, its knowledge of the conclusion is scientific, which cannot be false."[200] In his commentary on *De Trinitate*, Aquinas submits:

> In a second way, a method is called rational because of the end that terminates the thinking process. For the ultimate end that rational inquiry ought to reach is the understanding of principles, in which we resolve our judgments. And when this takes place, it is not called a rational procedure or proof but a demonstration.[201]

Aquinas further corroborates on the certitude of knowledge through *resolutio* as follows: "intellect can also be taken in a second sense – in general, that is, as extending to all its operations, including opinion and reasoning. In that case, there is falsity in the intellect. But it never occurs if a reduction to first principles is made

199 *ST*, II-II, q. 53, a. 4: "Sicut autem inquisitio pertinet ad rationem, ita iudicium pertinet ad intellectum, unde et in speculativis demonstrativa scientia dicitur iudicativa, inquantum per resolutionem in prima principia intelligibilia de veritate inquisitorum diiudicatur. Et ideo consideratio maxime pertinet ad iudicium. Unde et defectus recti iudicii ad vitium inconsiderationis pertinet, prout scilicet aliquis in recte iudicando deficit ex hoc quod contemnit vel negligit attendere ea ex quibus rectum iudicium procedit."

200 *SCG*, IV, Ch. 92, n. 7: "Intellectus noster circa conclusiones aliquas errare potest antequam in prima principia resolutio fiat, in quae resolutione iam facta, scientia de conclusionibus habetur, quae falsa esse non potest." [Trans mine].

201 *In De Trin*, q. 6, a. 1: "Ultimus enim terminus, ad quem rationis inquisitio perducere debet, est intellectus principiorum, in quae resolvendo iudicamus; quod quidem quando fit non dicitur processus vel probatio rationabilis, sed demonstrativa."

correctly."[202] Aquinas considers reduction (*resolutio*) as the facilitator of truth of the intellect proper as confirmed by the words: "But it never occurs if a reduction to first principles is made correctly."[203] Subsequently, Aquinas confirms the need to reason properly through 'judgment' (*resolutio*) in the light of the principles.

Considering Aquinas' notion on the mind's double circular motion, one perceives an evident similarity in the Thomistic texts. Human reason, by way of research, proceeds from a few easily learned evident truths, i.e. the first principles, and judges analytically through a return to the principles in order to establish (reconfirm) the discovery.[204] In addition, as the Angelic Doctor asserts, "through first principles we proceed to discover, and judge of what we have discovered."[205]

The context of the latter is the reality of the habits of principles, which we discussed in Chapter Four. This citation accentuates another sense of the term *iudicium*; in fact, it is tied to its habitual propositional meaning. Sanguineti is right in his proposal that judging is the intellective affirmation of the truth (in a propositional sense). Additionally, it is an intellectual confirmation of the truth of a rational conclusion; it is not unusual to find the latter implication, especially, in forensic activity. This is to say that to judge human actions is to submit such actions to the verdict of the law (principle). Therefore, judging in this sense, is giving a truth-value to a proposition (to establish the verity of falsity) by connecting it to a higher principle.[206]

From the foregoing, we learn that the principle is never employed solitarily. To deduce a new truth, or to examine a truth already known or discovered, involves juxtaposing the principle with another more particular truth, on which the investigation is being conducted. Accordingly Aquinas corroborates that: "in discovery, the procedure of anyone who arrives at the knowledge of something unknown is to apply general self-evident principles to certain definite matters, from these to proceed to particular conclusions, and from these to others."[207] Aware that in reality there could be insufficiencies as regards the application, Aquinas

202 See *De Ver*, q. 1, a. 12: "Alio modo potest accipi intellectus communiter, secundum quod ad omnes operationes se extendit, et sic comprehendit opinionem et ratiocinationem; et sic in intellectu est falsitas; nunquam tamen si recte fiat resolutio in prima principia."

203 See *De Ver*, q. 1, a. 12.

204 See *ST*, I, q. 79, a. 8.

205 *ST*, I, q. 79, a. 12: "Per prima principia procedimus ad inveniendum, et iudicamus inventa." The above illustration of Thomistic texts refers particularly to the rational process. Obviously the fact that the inductive part (inventive method) is omitted does not lessen its important import. As we indicated earlier, from a few texts, Aquinas equally accentuated induction in some other parts. However, the Thomistic notion of induction is mainly an empirical noetic illumination, for the appropriate interpretation of the *quid quod est*.

206 See J. J. Sanguineti, "Los principios de la racionalidad en Santo Tomás," 109–137, 125.

207 *De Ver*, q. 11, a. 1: "Processus autem rationis pervenientis ad cognitionem ignoti inveniendo est ut principia communia per se nota applicet ad determinatas materias, et inde procedat in aliquas particulares conclusiones, et ex his in alias."



acknowledges further that there could be probabilistic conclusions. Commenting on *De Trinitate*, he explains that: "Sometimes, however, rational inquiry, cannot arrive at the ultimate end, but stops in the course of the investigation itself; that is to say, when several possible solutions still remain open to the investigator. This happens when we proceed by means of probable arguments, which by their nature produce opinion or belief, but not science."[208] In Aquinas' view, in such a condition, the mind's search is inconclusive, and instead of a demonstration reason rather stops at a dialectical or probabilistic conclusion. Even in such instances, although negative, there is a supreme guide by the principles. The human opinion and belief are indirectly caused by the principles, since their light does not withhold consent to certain propositions.[209]

Although the *resolutio* to the principles is of paramount importance for proper realistic knowledge to exist in us, Aquinas illustrates the importance of the empirical data. Subsequently, Aquinas underscores the necessity of sense experience in any certified knowledge by adding that:

> The perfect judgment of the intellect cannot be found in one who is sleeping, because at that time our senses, which are the primary source of our knowledge, are inhibited. For a judgment is made by reducing to principles, and for this reason we must judge about everything on the basis of what we receive by the senses.[210]

It is apparent from Aquinas that the intellectual light strengthened in the first transcendental principles permits discernment between the real and the unreal, truth and falsity, the good and evil,[211] and similarly rational conclusions should always be in accord with experience. From this standpoint, Aquinas' interpretation of the axiomatic truth and experience could be equivalent to the 'principle

208 *In De Trin*, q. 6, a. 1.

209 See *De Ver*, q. 11, a. 1: "Si autem aliquis alicui proponat ea quae in principiis per se notis non includuntur, vel includi non manifestantur, non faciet in eo scientiam, sed forte opinionem, vel fidem; quamvis hoc etiam aliquo modo ex principiis innatis causetur. Ex ipsis enim principiis per se notis considerat, quod ea quae ex eis necessario consequuntur, sunt certitudinaliter tenenda; quae vero eis sunt contraria, totaliter respuenda; aliis autem assensum praebere potest, vel non praebere. Huiusmodi autem rationis lumen, quo principia huiusmodi nobis sunt nota, est nobis a deo inditum, quasi quaedam similitudo increatae veritatis in nobis resultans."

210 *De Ver*, q. 28, a. 3, ad 6: "Sed perfectum iudicium intellectus non potest esse in dormiendo, eo quod tunc ligatus est sensus, qui est primum principium nostrae cognitionis. Iudicium enim fit per resolutionem in principia; unde de omnibus oportet nos iudicare secundum id quod sensu accipimus."

211 For Aquinas, as everything (every judgment) terminates in the first transcendental principles, it is fitting also that experiential data is subsumed and reduced (*resolutio*) in them. The principles are values "ad quae omnia illa cognita examinantur, et ex quibus omne verum approbatur, et omne falsum respuitur." (*De Ver*, q. 16, a. 2).

of verification'. Hence, the Angelic Doctor asserts: "since the senses are the first source of our knowledge, we must in some way reduce to sense everything about which we judge."[212]

### a. *Précis on* Resolutio ad sensum *in Natural Sciences*

So far, we have principally dealt with the area of abstract speculation. One could also wonder how the notion of *resolutio* applies to natural sciences, like physics. Briefly, we consider that the *resolutio ad sensum* is more immediate and evident to these sciences. The reason, as Aquinas commenting on *De Trinitate* proposes, is that: "natural science proceeds from what is better known to us and less knowable in its own nature. This is evident in the Physics."[213] Knowledge of natural science should terminate in the senses, so that we judge of natural things according to what the senses show us.[214] Nonetheless, one needs to be cautious since, for Aquinas as well as for Aristotle, sensible knowledge presupposes an understanding of the immanent and primary intellectual knowledge.[215] The precise reason for the verification of the conclusions of natural sciences is that the rational physical premises do not exceed the level of physical abstraction. The Aristotelian-Thomistic orientation in physics is not phenomenalistic. Given the existing harmony between the sensitive and intellectual intuition, the sense data, also, are to be verified (*resolutio*). Consequently, Aquinas further affirms:

212 See *De Ver*, q. 12, a. 3, ad 2: "Sed quia primum principium nostrae cognitionis est sensus, oportet ad sensum quodammodo resolvere omnia de quibus iudicamus."

213 *In De Trin*, q. 6, a. 1.

214 See *In De Trin*, q. 6, a. 1. On the intellect's judgment as the hypothesis of science based on data from the senses, see also B. Mondin, *St. Thomas Aquinas' Philosophy in the Commentary to the Sentences* (The Hague: M. Nijhoff, 1975), 23–24.

215 The intuition of the singular in this case acts as the end of the practical syllogism, the extreme that is obviously one of the terms in which practical *resolutio* (judgment) is accomplished. According to Aquinas, the operational concrete event – that which I intend to do at the moment – is grasped by the inner sensibility penetrated by intelligence (the cogitative). Hence, Aquinas in line with Aristotle, affirms: "Et quia singularia proprie cognoscuntur per sensum, oportet quod homo horum singularium, quae dicimus esse principia et extrema, habeat sensum non solum exteriorem sed etiam interiorem, cuius supra dixit esse prudentiam, scilicet vim cogitativam sive aestimativam, quae dicitur ratio particularis. Unde hic sensus vocatur intellectus qui est circa singularia. Et hunc philosophus vocat in tertio de anima intellectum passivum, qui est corruptibilis." (*In VI Ethica*, lect. 9, n. 15). On the same notion, mention is made of a single operable *nous*; for details see also Aristotle, *EN*,: 1143b 1–10. Such an intellectual act accomplishes absolute judgment on rigorously singular aspects. In the same commentary, Aquinas appends: "Sicut pertinet ad intellectum absolutum in universalibus iudicium de primis principiis, … ita etiam circa singularia vis cogitativa hominis vocatur intellectus secundum quod habet absolutum iudicium de singularibus. … Dicitur autem ratio particularis, secundum quod discurrit ab uno in aliud." *In VI Ethica*, lect. 9, n. 21.



> In some cases the properties and accidents of a thing disclosed by the senses adequately reveal its nature, and then the intellect's judgment of that nature must conform to what the senses reveal about it. All natural things, which are bound up with sensible matter, are of this kind. So the terminus of knowledge in natural science must be in the senses, with the result that we judge of natural beings as the senses manifest them.[216]

This explains that sense datum is important for the mind to judge in physical sciences but also that the mind exercises judgment (*resolutio*) through the principles for knowledge to occur. Thus, with Aquinas we establish that "knowledge begins with apprehension but it ends with judgment, for it is there that knowledge is completed."[217] The apprehension, as underscored in Chapter Three, is usually from sensible information.

### b. *A Brief Appraisal on* Intellectus-Ratio *concerning* Resolutio

The double-sided movement, i.e. via *compositionis* and via *resolutionis*, belongs to reason and is controlled by intellectual principles which provide it with the contents. Besides, it is all about truth. For, as Aquinas suggests, if *resolutio* lacks in the understanding of truth, reason is in vain.[218] However, as we discovered through the Angelic Doctor, the reality remains that *ratio* would not be without the *intellectus*. This is because "the summit in our knowledge is not reason, but understanding, which is the source of reason."[219]

Nonetheless, as Aquinas observes, this superiority of the intellect is relative, because although the principles (starting from *intellectus principiorum*) are natural, they are maximally potential and an imperfect source of knowledge. Accordingly, Aquinas corroborates:

> Now, it is not possible that man's ultimate happiness consist in contemplation based on the understanding of first principles: for this is 'most imperfect', as being universal and containing potential knowledge of things. Moreover, it is the beginning and not the end of human study, and comes to us from nature, and not through the study of the truth.[220]

216 *In De Trin*, q. 6, a. 2.

217 *In De Trin*, q. 6, a. 2.

218 *Super Epist. I ad Tim*, Cap. VI, lect.1: "Et nisi resolvat usque ad intellectum veritatis, vana est ratio."

219 *SCG*, I, Ch. 57, n. 8: "Supremum autem in nostra cognitione est, non ratio, sed intellectus, qui est rationis origo."

220 *SCG*, III, Ch. 37, n. 8: "Non est autem possibile quod ultima hominis felicitas consistat in contemplatione quae est secundum intellectum principiorum, quae *est imperfectissima*, sicut maxime universalis, rerum cognitionem in potentia continens; et est principium, non finis

From the above citation, while the place of the *intellectus* is important and indispensable (as the beginning of all), it needs a fortification of a scientific nature from the truth of the dual-directional rational analysis (*resolutio*). Besides, the foregoing is a proof that although the axiomatic *nous* is natural and inextinguishable[221] in us, it is not the ultimate end of human investigation (*non finis humani studii*).[222] The principles starting from the *intellectus* only serve as a 'confused knowledge'.[223] Therefore, the *intellectus* must acquire a perfect possession of ultimate truth and knowledge, because of its virtual content of all sciences. Hence, the two-sided human process of knowledge is indispensable for proper human knowledge to exist.

## D. From *Intellectus* towards Wisdom

We come to the interpretation and import of *intellectus* as the most profound principle in us and in reality. Since the verification is about the *intellectus principiorum* in regard to the self-evident, we shall touch on the principles *quoad se* and *quoad nos* with reference to *sapientia*. How can we relate the principles to *sapientia*? Or, put simply, how does the intellect come to wisdom through the principles? Does an adequate discovery of the intellect necessarily lead to wisdom or is it purely a philosophical hypothesis? If it does, are there also necessary practical imports from the realistic Thomistic perspective? We expect that these and more unarticulated questions will assist us in this aspect of our analyses.

To begin, the intellect, *actus apprehensionis*,[224] usually expresses itself in the most profound realities. Through the knowledge of things, the intellect establishes its own actuality. From our considerations in Chapter Four, we understood that the intellect knows its own entity not through scientific or acquired knowledge but through a habitual knowledge. As Jordan explains, the intellect's grasp of itself as singular is not in any sense scientific. Conversely, the intellect's habitual knowledge of itself as singular is the presence of the intellect to itself. This knowledge is prior to any intellect's particular acts of subsequent

humani studii, a natura nobis proveniens, non secundum studium veritatis." [Emphasis on *imperfectissima* mine].

221 See *ST*, II–II, q. 154, a. 12; *De Ver*, q. 16, a. 3.

222 See *SCG*, III, Ch. 37, n. 8.

223 See *De Ver*, q. 18, a. 4: "Principium autem eius est in quadam confusa cognitione omnium: prout scilicet homini naturaliter inest cognitio universalium principiorum."

224 See *De Malo*, q. 2, a. 3, ad 7: "Actus apprehensionis in nobis, qui scientiam a rebus accipimus, est secundum motum a rebus ad animam."



understanding.[225] For this reason, Aquinas asserts: "the essence alone of the soul, which is present to the mind, is enough."[226] This implies further that the path to *sapientia* of the intellect begins from its 'natural' search to know itself better. Since we had a fairly detailed discourse on habits in Chapter Four, we do not intend to delve into them again. However, we will accentuate a few facts about the habits that will support our elucidations.

"Habits, like powers, are the principles of acts."[227] All knowledge starts by way of habits, as from a seed. As the intellect is present to itself habitually, its quest for actual knowledge of all things begins from this habit. The intellect's expression of its presence goes further by way of inquiry through its habit of knowledge; namely, *habitus principiorum*, to discover through other principles the highest of values. This is understood from Aquinas' suggestion: "The first kind of knowledge of the habit arises from its being present, for the very fact of its presence causes the act whereby it is known. The second kind of knowledge of the habit arises from a careful inquiry."[228] The mind's most sublime expressive evidence is in *sapientia*[229] since, as the Angelic Doctor illustrates, wisdom is like the architect of all intellectual judgments.[230] How then does the mind attain this wisdom? Through the process of the above-discussed *resolutio* (*inventio et iudicium*), the intellect establishes itself in *sapientia* by going back and forth itself with the knowledge.

Hence, it is given to all to know *sapientia* habitually since, as the Angelic Doctor affirms, *sapientia* is the highest intellectual habit because of its consideration of the highest causes. Accordingly, he explains:

> It belongs to wisdom to consider the highest cause. By means of that cause we are able to form a most certain judgment about other causes, and according thereto all things should be set in order. Now the highest cause may be understood in two ways, either simply or in some particular genus.[231]

225 See M. D. Jordan, *Ordering Wisdom: the Hierarchy of Philosophical Discourses in Aquinas* (Notre Dame (IN): University of Notre Dame Press, 1986), 129.

226 See *De Ver*, q. 10, a. 8: "Ad hoc sufficit sola essentia animae, quae menti est praesens."

227 *ST*, I, q. 87, a. 2 sc: "Habitus sunt principia actuum, sicut et potentiae."

228 *ST*, I, q. 87, a. 2: "Et prima quidem cognitio habitus fit per ipsam praesentiam habitus, quia ex hoc ipso quod est praesens, actum causat, in quo statim percipitur. Secunda autem cognitio habitus fit per studiosam inquisitionem."

229 See *In III Sent*, d. 35, q. 2, a. 4B, sc 2: "Sicut in speculativis est via inventionis et judicii, ita et in practicis. Sed in donis pertinentibus ad vitam contemplativam est aliud donum quod respondet inventioni, scilicet intellectus, et aliud quod respondet judicio, scilicet sapientia."

230 See *ST*, II–II, q. 45, a. 1.

231 *ST*, II–II, q. 45, a. 1: "Ad sapientem pertinet considerare causam altissimam, per quam de aliis certissime iudicatur, et secundum quam omnia ordinari oportet. Causa autem altissima dupliciter accipi potest, vel simpliciter, vel in aliquo genere."

Aquinas affirms that *sapientia* can be viewed in two ways: rational and connatural.

> Wisdom denotes a certain rectitude of judgment according to the Eternal Law. Now rectitude of judgment is twofold: first, on account of perfect use of reason, secondly, on account of a certain connaturality with the matter about which one has to judge.[232]

Since *sapientia* is seminal to the intellect in the process of the intellect's knowledge of itself, so it is also given to all men to know *sapientia* and be wise through the discovery of the truth. This is to say that wisdom is expressed primarily in truth, because truth is *adaequatio intellectus et rei*,[233] and, wisdom judges the highest and most certain of all, material or immaterial.[234] Since the highest of all is parallel to truth in all its forms, for the intellect to discover wisdom at any level is to be true to itself, to be in its process of continuous perfection, and to attain the conformity with its judgment and composition about *res*.[235] Hence, our search is geared towards the discovery of the intellect's realisation of wisdom. Given that the mind can only do so beginning with the first principles in all fields of knowledge, therefore, our investigation is essential. We hope to come back to this subsequently.

Now there are varied ways in which the intellect attains wisdom about itself and things through the principles. In view of our findings and as Jordan suggests, there are two classes of *principia prima*, subsistent and inherent. Following this classification is another group of two kinds of common *principia*, which extends to all being; some of these *principia* are common through predication, while others are common by way of causality. Yet again, there are principles common to all beings in each of the above-stated ways. This implies that there is a hierarchical order among the principles that can be retraced to ontological incorruptible substances. These incorruptible substances are 'divine things' in an Aristotelian sense.[236] To arrive at the summit, which is *sapientia*,[237] the intellect invariably makes the circular movement (*resolutio*) with any class of the principles.

232 *ST*, II–II, q. 45, a. 2: "Sapientia importat quandam rectitudinem iudicii secundum rationes divinas. Rectitudo autem iudicii potest contingere dupliciter, uno modo, secundum perfectum usum rationis; alio modo, propter connaturalitatem quandam ad ea de quibus iam est iudicandum."

233 See *De Ver*, q. 1, a. 1: "Prima ergo comparatio entis ad intellectum est ut ens intellectui concordet: quae quidem concordia adaequatio intellectus et rei dicitur; et in hoc formaliter ratio veri perficitur."

234 See *ST*, II–II, q. 45, a. 1.

235 See *De Ver*, q. 1, a. 3.

236 See M. D. Jordan, *Ordering Wisdom*, 150.

237 We use *sapientia* here in an inclusive sense to cover all spheres of knowledge whose *terminus a quo* and *terminus ad quem* is the Christian God, i.e. *Sapientia* personified.



Although all sciences work with the principles, the most sublime is metaphysics. Metaphysics is the only science that articulates the subsistent ontological substances as *principia*.[238] Jordan corroborates that, due to the limitation of human understanding, these subsistent 'divine' principles are investigated in metaphysics only as *principia communia omnium entium*, as they intrinsically are in their physical effects.[239] This explains the further assertions of Aquinas about metaphysical inquiry that examines *ea quae sunt communia omnibus entibus*[240] with its subject as *ens in quantum est ens*.[241] The metaphysical analysis (*resolutio*) in search of *sapientia* has its peak in the Divine as the Ultimate Principle. Thus, as Jordan in line with Aquinas acknowledges, the metaphysical science (philosopher's theology in Jordan's terms) investigates God and other separate beings *non tamquam subiectum scientiae, sed tamquam principia subiecti*.[242] Given this all-important role of the metaphysical science, the Angelic Doctor attributes some specific *per se nota quoad nos* mainly to the wise, since metaphysics is pre-eminently a science of *sapientia*.

To what extent is the intellect's discovery of *sapientia* involved in the speculative as well as the practical fields? We note that this wisdom, according to Aquinas, is of two-fold character to the extent that it is knowable to the human intellect. Thus, the Angelic Doctor claims: "Wisdom is not merely speculative, but also practical."[243] Let us, therefore, consider the speculative and the practical imports of this noble intellectual virtue.

### *D.1.1 Rationality and* Resolutio *in Knowledge towards Wisdom*

The intellect, as we saw from our previous discourse on *resolutio*, proceeds through rationality to establish its judgment. Aquinas fittingly suggests, "to understand is simply to apprehend intelligible truth: and to reason is to advance from one thing understood to another."[244] In this sense, rationality is the mediating function and dynamic of the intellect. Just as intellective knowledge is

238 *In De Trin*, q. 5, a. 4: "Huiusmodi ergo res divinae, quia sunt principia omnium entium et sunt nihilominus in se naturae completae, dupliciter tractari possunt: uno modo, prout sunt *principia communia omnium entium*; alio modo, prout sunt in se res quaedam. Quia autem huiusmodi prima principia quamvis sint in se maxime nota, tamen intellectus noster se habet ad ea ut oculus noctuae ad lucem solis, ut dicitur in II metaphysicae, per lumen naturalis rationis pervenire non possumus in ea nisi secundum quod per effectus in ea ducimur; et hoc modo philosophi in ea pervenerunt." [Emphasis on Latin Text mine].

239 See M. D. Jordan, *Ordering Wisdom*, 150.

240 See *In De Trin*, q. 5, a. 4; see also *In De Trin*, q. 6, a. 1; see also *In VI Ethica*, lect. 6, n. 5.

241 See *In De Trin*, q. 5, a. 4.

242 See M. D. Jordan, *Ordering Wisdom*, 150; see also *In De Trin*, q. 5, a. 4.

243 *ST*, II–II, q. 45, a. 3 sc: "Sapientia non solum est speculativa, sed etiam practica."

244 *ST*, I, q. 79, a. 8: "Intelligere enim est simpliciter veritatem intelligibilem apprehendere. Ratiocinari autem est procedere de uno intellecto ad aliud."

transmitted to rational conclusion, in like manner, the holistic pair *intellectus-ratio* is also cyclic. This implies that one starts from the intellect and proceeds to reason and goes back to the intellect, if the definitive knowledge is to 'really understand' and not to demonstrate.[245] Since our research is geared towards holistic/definitive knowledge, we shall first consider the diverse forms of rational processes. This is to assist us to ascertain the appropriate *sapientia* that accompanies rationality.

The rational endeavour is to employ meaningfully the intelligible material of knowledge, namely, the first principles. The latter are lights that guide our reason towards the intelligible bond within the frame of our concrete knowledge; some include immediate universal truths of concrete facts of experience or assumptions and conceptions of our mind. This calls attention to the causal aspect of rationality. When we perceive natural occurrences, the problem posed by those 'causes' does not emerge automatically. Rather, perceiving things around us instigates the mind to ask the question 'why'? This is what the principle of causality urges us to do; however, it does not supply the response *a priori*. It induces our minds into inquiry pointing towards the unknown causes. The 'why' question paves the way for reason since it drives the mind into the discovery of hidden facts through the more evident reality.[246] The 'why' question is the root of every scientific knowledge rooted in wisdom.

Consequently, science is a systematic and definitive form of rationality. According to Aquinas: "Yet science has a more perfect mode of knowing its object, which is not incompatible with vision which is the perfection of happiness."[247] Generally, brief rational inferences could be made spontaneously, without reference to causes and detailed thinking, as we witness in daily living. Often such is related to mature perception. When, for instance, one hears a noise made in a calm moment from the sound of a car that drives past, automatically the cause of the noise is obvious in our minds that a car just passed. This is not what we mean by intellectual processes that produce *sapientia*. This sort of thinking does not require any 'why' question or a particular inference for its causal intuition. This is explicable by the fact that an understanding of this kind occurs even at the practical perceptual level. Such immediate awareness is not particular to human beings, since even animals in their limited perception, lacking abstract thinking, can instinctively perceive such. On the other hand, the human person is capable of organising a systematic inferential structure in regard to many relatively large aspects of reality or of human procedures. Hence, we have the inception of science.

245 See J. J. Sanguineti, *Introduzione alla gnoseologia*, 196–197. [Emphasis on 'really understand', mine].
246 See J. J. Sanguineti, *Introduzione alla gnoseologia*, 198.
247 See *ST*, I–II, q. 67, a. 3, ad 1: "Sed scientia habet perfectiorem modum cognoscendi, qui non repugnat perfectioni beatitudinis, scilicet visioni."



As Sanguineti acknowledges, the cognitive verb parallel to science is 'to know', in other words, to know in a rationally, causal and established way.[248]

Furthermore, the rational knowledge demonstrated or based on causal relations is an 'explanation'. Since intellective knowledge first grasps immediately in a synthetic way and without details, the explanation serves in the elaboration of the data grasped initially. What, therefore, is the content of the said 'explanation'? In an attempt to 'adequately know', the human mind 'explains' through a rational process a term (proposition), a phenomenon, and a reality. The human mind can only make this articulation by way of inference, starting from causal or logical principles. This simply implies that, if the mind knows anything in reality as such, it is because of the first principles; i.e. we can know Z because of the Y. This is to rationalise, coming to an actual definitive knowledge through a (rational) movement; this also means that by so doing the former Y has been 'explained' through the later Z. If the investigation is about physical things, this involves the four types of causes (formal, material, efficient and final). The 'explanation' necessarily addresses any of the four causal notions in physical reality. For this reason, every 'explanation' constitutes the conclusion of the rational movement. Usually, in the conclusion, there is the articulation of several scientific hypotheses. Hence, as Hoenen affirms, in this way scientific assumptions are wholly intelligible and our knowledge of them is close to an intuition.[249] In fact, according to Aquinas, this knowledge is regarded as 'intellectual vision'. And so, Aquinas corroborates that:

> On the part of the subject the difference of perfect and imperfect knowledge applies to opinion, faith, and science. ... To science it is essential to have firm adhesion with intellectual vision, for science possesses certitude which results from the understanding of principles.[250]

The foregoing citation establishes the Thomistic foundation of all the sciences on the first principles. The rational cyclic tour in order to affirm any scientific knowledge grounds itself in a principle. Therefore, any human attempt to understand a thing, a phenomenon, or a proposition, invariably evokes from the mind the question 'why'. Consequently, the 'explanation' answers the question 'why'. This question arises because of the lack of appropriate knowledge of the 'being' (*esse*) of things in us at the inception of the knowing process,[251] and that leaves us dissatisfied.

248 See J. J. Sanguineti, *Introduzione alla gnoseologia*, 198.
249 See P. Hoenen, *Reality and Judgment According to St. Thomas*, 126.
250 *ST*, I–II, q. 67, a. 3: "Ex parte vero subiecti differunt secundum perfectum et imperfectum opinio, fides et scientia. ... De ratione vero scientiae est quod habeat firmam inhaesionem cum *visione intellectiva*, habet enim certitudinem procedentem ex intellectu principiorum." [Emphasis on intellectual vision mine].
251 See P. Hoenen, *Reality and Judgment According to St. Thomas*, 130–131.

As Aquinas appositely observes, the human intellect cannot know singular things directly except by reflection.[252] This reflection (rational analysis) is introduced and ends in the mentioned 'why' and 'explanation', respectively. Hence, with self-maturity in our empirical knowledge of causation of the physical reality, we are cognisant of the inadequacy of that which we already know and that induces our minds to go beyond the basic data. In order to properly ascertain an explanation, we need to first become aware of our ignorance (the lack). This is the beginning of real inquiry because, if anyone is satisfied by mere limited phenomenal description, the quest for further inquiry does not arise and one demonstrates ignorance. As a result:

1. The ontological instinct could be articulated as: 'why' is 'this' or 'that' the way it is; is there anything beyond the obvious?
2. The logical inquiry, conversely, could suggest the 'why' questions about the truth of statements and propositions, etc., and these invariably lead to noetic principles.
3. The physical causal line of investigation, on the other hand, refers to actual reasons: e.g. 'why' hunger and/or sickness?[253]

For actual (scientific) knowledge, the 'explanation' often is neither limited to reason (*ratio*) nor separated from understanding (*intellectus*). This implies that in reality man does not usually employ disjointedly the understanding (*intellectus*) and reason (*ratio*), but uses prolonged intellect in reason enlightened by the intellect (*intellectus* as *nous*).[254] We will nominate this as 'intellective-reason'. As such, reason remains connected to the intellect and explanation. Nonetheless, in few instances, as in formal reason, there could be separation of reason from the intellect. Examples are the purely axiomatic and logical forms of reasoning, which do not constitute our main exploration about reality.

The human mind experiences a profound propensity for the 'explanation' of what exists or happens in the real world. If not, it could not make the inquiries or articulate the 'why' that qualifies man as a rational animal. Questions arise not from a fact known in a flat and structureless mode. This 'why' has an existing connection to other questions, such as: What is it? What is the essence of things; how does it function? How about its characteristics or mode; why does it exist? These initial questions finally lead to more sublime questions related to the existence of that which we do not grasp instantly. At this point the 'explanation' of the

252 See *ST*, I, q. 86, a. 1: "Singulare in rebus materialibus intellectus noster directe et primo cognoscere non potest. ... Unde intellectus noster directe non est cognoscitivus nisi universalium. Indirecte autem, et quasi per quandam reflexionem, potest cognoscere singulare." See *De Ver*, q. 10, a. 5.

253 See J. J. Sanguineti, *Introduzione alla gnoseologia*, 199.

254 See J. J. Sanguineti, *Introduzione alla gnoseologia*, 200. We use *intellectus* here in an Aristotelian (technical) manner as *nous*.



natural sciences having reached their limits, gives way to metaphysical intervention. In view of this, Jordan proposes that the principles supplied by physics to metaphysics are not sets of laws to be applied, but cases for elucidation. They are more like the phantasms or facts than like 'laws of nature'.[255]

Furthermore, since our knowledge usually works through language, the rational hermeneutic dimension is required. Thus, one can always ask with respect to something verbally enunciated, heard or read: what does that mean? Here, we are confronted with another structure of rationality, which exists between signs and understanding (interpretation) of their meaning. Hence, as Sanguineti explicates, there occurs the necessity to add 'signs/meaning' to established pairs of premises/conclusions, cause and effect, if the meaning is not obvious and should rationally be explored. Consequently, 'explanation' embraces also a clarification of the linguistic sense.[256] Thus, the human person, according to Aquinas' hypotheses on *nous/logos* (*intellectus/ratio*), is potentially capable of grasping the entire reality in an intellective-reason unity. Aquinas uses the principles at all levels through the intellective-reason dynamics to understand the non-evident things through causal metaphysical inquest.[257] In the mind's blend through 'explanation' is found the actuality of the apprehension of the subtlest universal truths. Since *sapientia*, according to Aquinas, is judgment,[258] we are well on our way to ultimate *sapientia*.

There are myriads of ways and examples by which the intellective-reason movement attains true scientific knowledge in the judgment we articulate as *resolutio*. So far we have dealt with analysis that forms scientific knowledge, i.e. a definitive kind of knowledge. We shall now touch on the workings of the real principles to help us appreciate the mechanism in order to arrive at our desired terminus.

### *D.1.2 An Overview on the Real Principles* ad Sapientiam

In view of the foregoing, we come to the examination of real ontological principles. We do not commence with a profound insight (intuition) about sublime realities of first causes; pure essences and fundamental principles of reality are initially hidden from our immediate vision. To access them, we need the assistance of the first principles *quoad nos* – i.e. the PNC, causality etc. – as applied to the empirical data. This is the only way we can get to the mediated knowledge of the

255 See M. D. Jordan, *Ordering Wisdom*, 172.

256 See J. J. Sanguineti, *Introduzione alla gnoseologia*, 200.

257 This is associated with the precedent proposal of Jordan about the principles of physics, which are not verified in such inquiries but are illuminated in order to use them to understand the most sublime realities. And this is the ultimate of the mind's *resolutio* that we will soon survey.

258 See *ST*, I, q. 79, a. 1, ad 3: "Dum vero id quod est excogitatum examinat ad aliqua certa, dicitur scire vel sapere; quod est phronesis, vel sapientiae, nam sapientiae est iudicare." See also *Met*, I, 982a 15–16.

first principles *quoad se*. Hence, we can arrive through them at the existence of God in metaphysics, the essential relativistic principles or quantum physics, etc.

Accordingly, we have to proceed from first noetic principles, which are, also, ontological ones, always through experience, to the universal realistic first principles. These ultimate causes and principles govern every reality in the universe, and to know them we grapple with uncertainties without getting to understand them perfectly. Nevertheless, as Sanguineti asserts, once known, these principles and causes cast a powerful light on the diversified experiences of humanity and to some extent they provide us with a *propter quid* or causal knowledge of reality.[259] However, this sort of knowledge remains limited and imperfect. This is the grounding for the continual inquest of the human mind to approach a better understanding of the ultimate causes and principles that explain and govern the entire reality. Thus, it is the task particularly of philosophy followed by the sciences to explain the 'why' of the universe through diversified realities.

The precedent considerations confirm part of the reason for this research on the Thomistic realistic notion of the first principles, especially the noetic/ontological principles. Since we cannot know reality as it is without a fair appreciation of these principles and causes, we perceive the need for a rigorous search into them for a better apprehension of reality. In this attempt, we are conscious that the human mind is limited and cannot always arrive at a rigorous demonstration of the existence of the indicated mediated real principles. Our 'explanations' are clear only about effects that lead to such principles and then we assume the rest. For this reason, we have to admit to live often with 'suppositions'. For instance, in many cases – in cosmology, physics, politics, and philosophy – the human mind assumes real principles with an attitude of 'faith'.[260] Man is not assured or has no guarantee that his mind does not deceive him in such instances; so, he should take it all with 'faith' (this implies that one develops confidence in one's own mind). In view of these lacunae, Aquinas observes:

> Now it is clear that imperfect knowledge belongs to the very nature of faith: for it is included in its definition; faith being defined as "the substance of things to be hoped for, the evidence of things that appear not" (*Heb.* 11:1). Wherefore Augustine says (*Tract.* xl in Joan.): "Where is faith? Believing without seeing." But it is an imperfect knowledge that is of things unapparent or unseen. Consequently imperfect knowledge belongs to the very nature of faith: therefore it is clear that the knowledge of faith cannot be perfect and remain identically the same.[261]

259 See J. J. Sanguineti, *Introduzione alla gnoseologia*, 201.

260 Faith utilised here is in a generic sense. It is not tied to any creed system, religious doctrine, or formula of religious belief. It could be interpreted as any of the established human individual mind's anchors or accredited phenomena.

261 *ST*, I–II, q. 67, a. 3.



This implies that the only option open to the human mind with its limited nature is to necessarily attune to faith where the empirical data reaches its peak. 'Faith', therefore, assumes the optimal source of knowledge where physical science is exhausted. As long as the human mind remains the admixture of matter and the immaterial, the human mind's invariable *resolutio* of some things will be by inference in the form of articles of 'faith'. In many deductive sciences, such as physics, since the principle is not evident, but assumed by faith, such is regarded as a hypothesis. The hypothesis is confirmed (authenticated) only by virtue of its 'explanatory' (explicative) power, from other self-evident principles of the higher order, namely, metaphysics.[262] This 'faith' except in revelatory sciences (like theology), is proven and translated into the finest method of *resolutio* of the science of metaphysics. This faith is not blind or irrational; rather, it is as we underscored earlier, an intellectual vision of a sort, a mental gymnastic whereby the mind reaches its acme of rationality. As we shall discover, we experience it in the theoretical as well as the practical order.

### *D.1.3 The Bipartite* Resolutio-Compositio *Intellectual Climax in* Sapientia

The above considerations on the rational cyclic movement of *resolutio* and *compositio* proceeded from first principles to intellectual conclusions. However, if we expect the *compositio* (*inventio*) to arrive at the knowledge of causes, there is need to introduce another sense of this dual movement. This is to allow the rationally grasped causes to acquire the function of the principle of *resolutio*. The meaning is that as the first step of our intellectual analysis traced the path of the conclusions from the principles, now the inverse of that movement would apply if the mind were to attain the actual sublime causes of reality. Hence, the first sort of movement of the *resolutio* is noetic and logical. To analyse properly, we start from the abstract intuitively known and experiential principles. We refer to these principles as a logical and epistemological primacy in the order of our knowledge. The second and profound sort of movement involves real entities like God, or come from an indirectly discovered principle. To these principles corresponds an ontological primacy,[263] which is also gnoseological, because for human rationality to ruminate through these fundamental principles, they must be accessible to the intellect through some kind of mediation. The *resolutio* involved in this mechanism is no other than the metaphysical. Therefore, Aquinas submits:

262 See J. F. Wippel, "Commentary on Boethius's De Trinitate: Thomas Aquinas and Avicenna on the Relationship between First Philosophy and the Other Theoretical Sciences: A Note on Thomas's Commentary on Boethius's De Trinitate, q. 5, art. 1, ad 9," in *The Thomist* 37 (1973), 133–154, 142–143.

263 For further details on this discourse, see J. J. Sanguineti, "Los principios de la racionalidad en Santo Tomás," 109–137, 131–134.

> For by way of discovery, we come through knowledge of temporal things to that of things eternal, according to the words of the Apostle (Rm. 1:20), "The invisible things of God are clearly seen, being understood by the things that are made:" while by way of judgment, from eternal things already known.[264]

According to the metaphysical order in Aquinas' understanding, the 'analytical' procedure corresponds to the path of discovery, *inventio*, because through rational process the human mind easily discovers the mediated principle and this, in turn, is utilised for subsequent judgment, i.e. the analytical process. Conversely, in the synthetic process, there is a correspondence of the precedence of the principle in knowledge and in being. Synthesis assumes the judgmental role, since judgment implies going from cause to effect; in other words, *compositio* corresponds to *iudicium*. Hence, Aquinas asserts:

> In every inquiry one must begin from some principle. And if this principle precedes both in knowledge and in being, the process is not analytic, but synthetic: because to proceed from cause to effect is to proceed synthetically, since causes are more simple than effects. But if that which precedes in knowledge is later in the order of being, the process is one of analysis, as when our judgment deals with effects, which by analysis we trace to their simple causes.[265]

From the above Thomistic excerpt, there is a principle in each of the processes either mediated or immediate. This further means that to arrive at *sapientia* in speculation, judgment is made through a reduction of principles and inversely into a principle. Nonetheless, in the *compositio-resolutio* attained through the simple logical and epistemological method, there must not be an actual conformity with a primitive discovery. Deductions can be made from pure logical premises or, on the other hand, a confirmation of such conclusion from the latter to the premises. On the contrary, in ontological *resolutio-compositio*, there is an existential duality of rational motion, since initially there is an upward movement to the causes, and starting from the causes, the effects are better known. Aware of this fact, Jordan in

264 *ST*, I, q. 79, a. 9: "Nam secundum viam inventionis, per res temporales in cognitionem devenimus aeternorum, secundum illud apostoli, ad Rom. I, invisibilia dei per ea quae facta sunt, intellecta, conspiciuntur, in via vero iudicii, per aeterna iam cognita de temporalibus iudicamus, et secundum rationes aeternorum temporalia disponimus."

265 *ST*, I–II, q. 14, a. 5: "In omni inquisitione oportet incipere ab aliquo principio. Quod quidem si, sicut est prius in cognitione, ita etiam sit prius in esse, non est processus resolutorius, sed magis compositivus, procedere enim a causis in effectus, est processus compositivus, nam causae sunt simpliciores effectibus. Si autem id quod est prius in cognitione, sit posterius in esse, est processus resolutorius, utpote cum de effectibus manifestis iudicamus, resolvendo in causas simplices."



line with Aquinas affirms that, having grasped the first causes in metaphysics, we can demonstrate *propter quid* their effects.[266] Besides, the ontological movement conforms to the Aristotelian proposal of the *quia* and *propter quid*.

Concerning cognitive habits, from the preceding analysis, the logical noetic scope begins from original intellect through rational analysis to the production of the generic scientific habit. According to the Angelic Doctor: "the first indemonstrable principles belong to the habit of the intellect; whereas the conclusions which we draw from them belong to the habit of science."[267] The articulation of wisdom in the speculative field is mainly evident in the cognitive habit of metaphysical inquiry, whose identity is parallel to the *sapientia*. Thus, Jordan proposes that, as the highest natural *sapientia*, metaphysics aims at the grasp of the *principia*.[268] Based on this, the intellectual *resolutio* of the metaphysical character arrives at new cognitive habits of the specific order. Given that the metaphysical inquiry employs real principles and causes, in the intellectual analysis, it arrives at wisdom or specific science. The former is the result, if the analysis is from God as a cause, and the latter is the case when one judges from other ontological causes. Thus, Aquinas explains:

> If this certitude of the judgment is derived from the highest cause, the knowledge has a special name, which is wisdom: for a wise man in any branch of knowledge is one who knows the highest cause of that kind of knowledge, and is able to judge of all matters by that cause: and a wise man absolutely, is one who knows the cause which is absolutely highest, namely God. Hence the knowledge of Divine things is called wisdom, while the knowledge of human things is called *'knowledge', this being the common name denoting certitude of judgment, and appropriated to the judgment which is formed through second causes.[269] *[Although this translation has 'knowledge', the original Latin word should be read as 'science'].

Consequently, for *intellectus* to express its full worth as the *principium activum* and the *intellectus principiorum*, it needs to be properly anchored in *sapientia*, starting from the created to the uncreated. Aquinas submits that: "Wisdom is

266 See M. D. Jordan, *Ordering Wisdom*, 171.

267 *ST*, I, q. 79, a. 9: "Principia prima indemonstrabilia pertinent ad habitum intellectus, conclusiones vero ex his deductae ad habitum scientiae."

268 See M. D. Jordan, *Ordering Wisdom*, 178.

269 *ST*, II–II, q. 9, a. 2: "Si quidem certitudo iudicii fit per altissimam causam, habet speciale nomen, quod est sapientia, dicitur enim sapiens in unoquoque genere qui novit altissimam causam illius generis, per quam potest de omnibus iudicare. *Simpliciter* autem sapiens dicitur qui novit altissimam causam simpliciter, scilicet deum. Et ideo cognitio divinarum rerum vocatur *sapientia*. Cognitio vero rerum humanarum vocatur *scientia*, quasi communi nomine importante certitudinem iudicii appropriato ad iudicium quod fit per causas secundas." [Emphasis in Latin text mine].

less, if it is deprived of the intellect, as Gregory says, while the intellect without wisdom is useless, since wisdom judges, and intellect understands, and it is worthless to understand, if one cannot judge, and vice versa."[270] Thus, the Angelic Doctor confirms his maxim, which we earlier accentuated that to be wise is to judge. Aquinas' consideration in the proposal that some principles are known only by the wise, is evident here. "Wisdom is concerned with judgment, while understanding renders the mind apt to grasp the things that are proposed, and to penetrate into their very heart."[271] According to the Angelic Doctor, "the intellect seems to name a simple apprehension, but wisdom names a certain fullness of certitude to judge the reality apprehended, and so the intellect seems to appertain to the way of discovery, but wisdom to the way of judgment."[272]

Ultimately, the Thomistic text just cited does not attribute to *sapientia* the decisional judgment of simply apprehended verity; it does not belong only to reason to judge but the intellect makes the prior judgment. Aquinas affirms:

> To judge is not a property of reason through which it can be distinguished from understanding. For understanding, too, judges that this is true and that false. But judgment and the comprehension of intelligence are referred to reason to this extent, that in us judgment commonly takes place through analysis into principles, whereas direct comprehension of truth takes place through understanding.[273]

It is obvious from the above citation that even *sapientia* is not an exclusive judgment, but the perfection and fullness of all judgments.[274] This is "because there can be no perfect and universal judgment except through *resolutio* to the first causes."[275] Consequently, the place of the metaphysical inquiry in this

270 *Super ad Coloss*, cap. 1, lect. 3: "Minor est sapientia, si intellectu careat, ut dicit Gregorius; et inutilis est intellectus sine sapientia, quia sapientia iudicat, et intellectus capit, et non valet capere, nisi iudicet, et e converso."

271 *ST*, II–II, q. 8, a. 6: "Ad sapientiam pertinet iudicium, ad intellectum vero capacitas intellectus eorum quae proponuntur, sive penetratio ad intima eorum."

272 *In III Sent*, d. 35, q. 2, a. 2: "Intellectus videtur nominare simplicem apprehensionem; sed sapientia nominat quamdam plenitudinem certitudinis ad judicandum de apprehensis: et ideo intellectus videtur pertinere ad viam inventionis, sed sapientia ad viam judicii."

273 See *De Ver*, q. 15, a. 1, ad 4: "Iudicare non est proprium rationis, per quod ab intellectu distingui possit, quia etiam intellectus iudicat hoc esse verum, illud falsum. Sed pro tanto rationi iudicium attribuitur, et comprehensio intelligentiae, quia iudicium in nobis ut communiter fit per resolutionem in principia, simplex autem veritatis comprehensio per intellectum."

274 See J. J. Sanguineti, "Los principios de la racionalidad en Santo Tomás," 109–137, 133–134.

275 *ST*, I–II, q. 57, a. 2: "Iudicium perfectum et universale haberi non potest nisi per resolutionem ad primas causas." [Official Trans modified]. We should note here that the Thomistic analysis does not lead simply to the first principles but, as Sanguineti aptly suggests, to the first causes. This indicates that *sapientia* is superior to the intellect, and that is why the acme of the intellect's *resolutio* is in *sapientia*.



intellectual link to wisdom cannot be overemphasised. Through metaphysics, *intellectus* judges (*resolutio*) all and arrives at the peak of its natural judgment through the optimal *sapientia*, i.e. the highest of causes. The Angelic Doctor gives this science the right of place after theology and describes it as the highest, but an imperfect human way to attain the habit of knowledge/wisdom.[276] In this way, God is rightly confirmed as the appropriate object of *intellectus*.[277]

### *D.1.4 Towards Practical* Sapientia

We come to verify the practical aspect having in mind the understanding of the essential import of the intellect towards theoretical wisdom. The wisdom of the intellect will be incomplete if it is not depicted in action, because virtue is proven through its active expression. We already underscored in Chapter Four that synderesis with its contents is well attuned towards the ultimate reality. Earlier in this chapter, we saw the interconnectedness of the Decalogue with the precepts of the natural law. We established that most of the common precepts (practical principles) are *per se nota* and they habitually lead to the love of God. The love of God is identified in the context of the practical principles and goes hand-in-hand with the love of one's neighbour. The reason for our love of neighbour is spelt out in our love of God. The essence of the precepts of love (of God and of man) has the notion of the 'good', which is the governing (underlying) principle in every human undertaking. Synderesis is the understanding of the principles; it has something of the higher reason (God) and the lower reason (human rationality). Thus, Aquinas affirms: "wisdom is attributed to the higher reason, science to the lower."[278]

Therefore, according to the just-cited Thomistic excerpt, Aquinas identifies with Augustine in attributing wisdom to the higher reason. The perfecting action of wisdom is seen through reason's higher operation. However, the connection of both aspects of reason with the intellect is made manifest through the moral sphere in the noetic seed, namely, synderesis.[279] Given that synderesis is the natural habit of the first principles, it governs moral actions; yet, it is not exactly the higher or the lower. How then does Aquinas regard synderesis, considering its indispensable nature and role?

For the Angelic Doctor, the expression 'synderesis', being neither of the two grades of reason, signifies mainly to live according to reason. Accordingly, Aquinas expounds:

276 See *In De Trin*, q. 6, a. 4, ad 3. For more details on metaphysics' excellence and its natural leading into theology to supply its limits, see M. D. Jordan, *Ordering Wisdom*, 178.

277 See *In De Trin*, q. 6, a. 1, sc 3.

278 *ST*, I, q. 79, a. 9: "Superiori rationi attribuitur sapientia, inferiori vero scientia."

279 See J. J. Sanguineti, "Los principios de la racionalidad en Santo Tomás," 109–137, 134.

> Synderesis does not denote higher or lower reason, but something that refers commonly to both. For in the very habit of the universal principles of law there are contained certain things which pertain to the eternal norms of conduct, such as, that God must be obeyed; and there are some that pertain to lower norms, such as, that we must live according to reason.[280]

Consequently, to live according to reason is natural to the human person and in it is found practical wisdom. On the contrary, not to live according to reason violates synderesis and the natural human inclination. Synderesis with its content refers to God because, rationally understood, the human mind tends naturally to the 'good' and the good is, ultimately, found in God.

Subsequently, synderesis plays a vital role of *resolutio* into wisdom because God, as we saw in theoretical ambit, is *sapientia*. From our findings through Thomistic submissions on synderesis, one can infer:

- Synderesis, in a general sense, the immediate insight of rational practical knowledge, necessarily includes the perception of obedience to God. This implies that, to the spontaneous 'rational' knowledge of God corresponds an adequate moral understanding of the general contents of the first precept of the Decalogue.[281] As Aquinas affirms, there exists in the human reason the natural tendency towards the knowledge of the truth of God, which constitutes the foundation of the moral precepts with regard to God.
- Synderesis suggests the knowledge of God as the ultimate end and, in this sense, belongs to wisdom. This is proportionate to a more profound knowledge of the Supreme Being, as is the case in philosophy, religion, or in a much higher degree as in the context of revealed religion. This can be paralleled to higher reason. Aquinas affirms that: "there is no one who does not judge that something is the end of human life. And, when he uses that as a basis of his deliberation, he is using higher reason."[282]
- *Sapientia* is higher than synderesis and *intellectus* or *ratio* (both *superior* and *inferior*). In other words, the *nous* of the first principles leads to the highest of causes, namely *sapientia*. And so, "science depends on understanding as on a virtue of higher degree: and both of these depend on wisdom, as obtaining the highest place, and containing beneath itself both understanding and science, by judging both of the conclusions of science, and of the principles on which they are based."[283]

280 *De Ver*, q. 16, a. 1, ad 9: "Synderesis neque nominat superiorem rationem neque inferiorem, sed aliquid communiter se habens ad utramque. In ipso enim habitu universalium principiorum iuris continentur quaedam quae pertinent ad rationes aeternas, ut hoc quod est deo esse obediendum; quaedam vero quae pertinent ad rationes inferiores, utpote secundum rationem esse vivendum."

281 See *ST*, I–II, q. 94, a. 2.

282 *De Ver*, q. 15, a. 4, ad sc (*rationis in contrarium*): "Nullus est enim qui non aestimet in aliquo esse finem humanae vitae; et cum ex illo deliberationem accipit, ad rationem superiorem pertinet."



## E. Conclusion

As our aim in this chapter was to ascertain an indirect demonstration of the first principles, we started with the notion of demonstration *ad absurdum* as evidenced in Aquinas' *Commentary on the Aristotelian Metaphysics*. We made this choice because it is the one available to us since Aquinas does not devote an independent argument on demonstration *ad absurdum* of the first principles. Our considerations on this theme led us to a few other interpretations of some scholars, namely Berti, Livi, and Sanguineti. We discovered among others that the first principles could only be demonstrated *ad absurdum* through the Aristotelian dialectical method with employment of the PNC. This entails the use of the refutation included in the famous *èlenchos* method. This dialectical refutation confirms the principles through the detection of contradiction of the very thesis of the denier of the first principles. We confirmed through our various samples that the first principles as indispensable foundations of realistic knowledge are demonstrated in the negation of their negator. Thus, metaphysics is enriched in its dialectical problematics and not in simple intuitive unproved innovations.

The foregoing led us to the *per se* and *per se nota* in Aquinas as the horizon of 'evidence' in the Angelic Doctor's mind. Through that we weighed the relationship of the *per se nota* in the Thomistic understanding with the first principles. Using one of the articles of the Summa as exemplary, we considered the *per se nota* at different levels i.e. mainly, *per se nota quoad se* and *per se nota quoad nos*.

This led us to the notion of and a brief exploration of truth, intelligibility, and rational judgment. Within this spectrum, we examined two major aspects, namely relationships connected with truth's intelligibility and the mind's *resolutio* operations. In this survey, we tried to understand how the mind works with the data provided by the principles in an attempt to judge every reality and/or *res*. That offered us the opportunity to delve into the notion of the rational processes of *inventio* and *iudicium*, *resolutio* and *compositio*.

283 See *ST*, I–II, q. 57, a. 2, ad 2: "Scientia dependet ab intellectu sicut a principaliori. Et utrumque dependet a sapientia sicut a principalissimo, quae sub se continet et intellectum et scientiam, ut de conclusionibus scientiarum diiudicans, et de principiis earundem."

We finally came back to the notion of *intellectus* in order to discover the mind's *resolutio* in *sapientia*. We discovered that, although the *intellectus* is the *primum principium par excellence*, *sapientia* is the highest of all habits, because it instructs the intellect. Hence, the *intellectus* discovers the *primum cognitum* through *simplex apprehensio*, but the intellect also finds its *resolutio* in *sapientia*, theoretical as well as practical. Consequently, *intellectus* generates all sciences from the lowest natural sciences through metaphysics, except theology, which is excluded from the scope of this research,[284] with its 'why' and 'explanation' through its *resolutio* in *sapientia*. In this finding is the intellect's full accomplishment as a principle.

284 Theology being a revealed science is beyond the human mind's manipulation. Instead, God, whose knowledge is ultimate *sapientia*, reveals himself in the Incarnation of the Word. In this way, the human intellect can only know this science as revealed, so it goes beyond our investigations here. The fundamental knowledge of God acquired through metaphysics is fulfilled only in this science. For further details on this see M. D. Jordan, *Ordering Wisdom*, 178.

# General Conclusion

*Principia prima* are structures of reality and knowledge themselves beginning from the most profound ontological status through to the extreme practical level. There is no existential knowledge without them. As such, the first realistic principles, according to their nomenclature, are fundamental to any human knowledge as primary truth-values. This suggests that to know anything in any field, as such, involves knowing with the first principles. To know this authenticity of their central nature is a step towards understanding metaphysical and ethical knowledge. The investigation into the ontological principles implies a fair apprehension of 'being' understood not merely as a physical phenomenon, or as an empirical object, but as an essential intelligible value. Since these principles play fundamental roles, each science assumes them for the justification and cogency of the study of its subject. However, for Aquinas, the principles are primary, absolute truths of 'being' and, implicitly, 'being' itself. Apparently, the Thomistic metaphysics revolves around *principia prima* because of this fundamental reality about their character. Following this, one can understand Aquinas' profuse employment of the first realistic principles at all levels in his philosophy. Hence, the first realistic principles, as it were, ground the entire philosophical inquiry. In view of the above, the quest for the knowledge of the first Thomistic principles is of capital importance. Nonetheless, it is not easy to attain these first principles, because the right modality of their conception and knowledge is complex. This could be the reason for the paucity of existent scholarship in the area.

In our attempt to grasp the Thomistic notion of *principia prima*, fundamentals in a realistic study, we have also arrived at the knowledge of Aquinas' philosophical consideration of God, the ultimate first ontological principle. By this ontological investigation, as is the case in Thomistic methodology to determine through human reasoning the principles and causes of subjects, we come to know the existence of God philosophically. To do this, Aquinas, by way of rationality presupposes the first ontological principles beginning first with the act-of-being in *ens*, the *primum cognitum*. This shows the primeval place of *ens* as the ontological primordial cognitive principle. Besides, Aquinas devotes much energy in the investigation and explication of what is knowable and accessible to the human mind about God as the uncaused causal principle of every other 'being'. The arrival at this conviction necessarily involves the systematic, scientific, and critical exposition through reasoning, which raises the human person from self-consciousness and knowledge of the world to the positive affirmation of God. Thus, God is the pure ontological principle always-in-act. For want of space, we

only touched on this argument in general terms, because it would need a separate thesis for proper development.

Now pertaining specifically to the finite principles, in his approach, Aquinas excludes the fact that the first principles can be known through a normal abstractive process. According to the Angelic Doctor, *principia prima*, as justifiers, are not the fruits of reasoning. This is because they are the origin and onset of any sort of reasoning either speculative or practical. The Angelic Doctor usually refers to them with Boethius' expression of verity, as axioms (*dignitates*) or as *per se notae communiter omnibus*. That is to say that the first principles are universal because they refer both to the knowledge of being in all its universality, and because they are naturally known to all people. Rightly, according to Aquinas, we grasp the first principles naturally (*sunt naturaliter cognita*). But what does he mean by 'naturally' in this circumstance? In our thinking, 'naturally' does not imply an effortless exercise in an attempt to understand the functionality of the first principles. Rather, *naturaliter* presents a puzzle to the investigator of the principles. The first principles are discovered as implicit, permanent, and absolute cognitive assumptions of our knowledge, our utterances and our actions. Such are the beliefs of every normal existential person about reality concerning the self and others in their fundamental communicative cognitive skills, and/or other natural certainties. Following this character of their universality and self-evidence, Aristotle hypothesises that even those who deny the first principles verbally cannot ignore or negate them. In the same vein, commenting on Aristotle's *Metaphysics*, Aquinas suggests that those who doubt the principles are not serious and, in their doubt, are afflicted by a kind of *infirmitas* of the mind. The foregoing, also, is a pointer to the extensive nature of the first realistic principles. From this, it is obvious that it is not easy to aptly or exhaustively survey the knowledge of all the first realistic principles. This is the reason for our basic option to handle a few, mainly the ontological/epistemological principles connected with being.

The search about the first realistic ontological principles in the Thomistic context presupposes an Aristotelian background, because the nucleus of Aquinas' notion about them is tied to Aristotle's. However, Aquinas' innovation introduces considerable practicality and enhancement to the Aristotelian model. In Aquinas, the intellectual principles assume special importance in the ethical sphere. This is because the recognition of fundamental moral principles is closely linked to the absolute moral understanding of the first principles, as in the principle of the 'good'. Subsequently, appropriate analyses of the Thomistic principles include also the habit of the practical principles, i.e. synderesis.

Our research, therefore, into the first Thomistic ontological principles began with the classical background and laid emphasis on Aristotle. For the same reason, this investigation spread through Aquinas' proper ontological principles while incorporating, particularly, the absolute ethical understanding of the first principles.



(I). In the First Chapter on the historical background, as an attempt to verify the origin of the inquiry into the first realistic principles, we began with the pre-Socratic Greek period up to Plato. This launched into a fairly extensive discourse on Aristotle, the trailblazer about the knowledge of the first principles. Subsequently, there was a brief examination of one of the prominent medieval figures, Augustine Aurelius, to determine his treatment of the first principles. This led to our study of the significant tendencies of modern philosophical schools that fruitlessly laboured to undermine the indispensable character of the first principles. In this consideration, there were sample schools of thought, like nominalism and empiricism, rationalism, idealism and Kant, modern axiomatism, and Popper and the problem of induction dealing with principles in a problematic way, all very different from the Thomistic approach. In response to these tendencies we ascertained that the first Aristotelian principles (recognised or refuted) are and remain as archetypes of 'being', despite opposing views. They are essential basic truths, which sustain the structural reality itself.

(II). The Second Chapter on the first principles, in the different works of Aquinas, brought us to the full appreciation of the Angelic Doctor's extensive use of the first principles. Through this investigation, we made an exegetical study of the *loca thomistica* concerning the *principia prima*. Since Aquinas never engaged in any methodical organisation of the first principles, but had scattered them in most of his works, philosophical as well as theological, this phase was particularly challenging and proved a herculean task. The application of an analytical, systematic study of the diverse categories of first principles gave us a better grasp of the Thomistic approach. Beginning with the grouping of recurrent ontological *principia prima* concerning being, causality, participation, God as the prime principle, through the ethical principles, we coherently examined Aquinas' usage of *principia prima*. Among others, there are no sharp distinctions between these principles; instead, there is an overlapping in their relationships, their articulations, and their functional modality in Aquinas. For instance, the first principles of causality, as potency and act, matter and form, efficiency and final cause, are correlates of the ontological principles of 'being' as in substances and accidents, and operations and actions. The same is applicable to *principia prima* concerning participation and the notion of God as the utmost prime principle. Such interrelations exist, also, in the practical realm as is perceptible in the principles pertaining to the good and right reason, virtue and the end.

In light of the above, through our examination of the various modalities of being (*ens*), we established the prominence of the principles in the overall Thomistic thought. Aquinas' writings also demonstrate the evidence of many "implicit secondary principles" that enhance the universal reality and knowledge. The doctrines of the "one and the many" and his view on analogy, also, are well merged in the Thomistic doctrine about the principles. As the theme 'first principles' has

not been well explored by Thomists, several principles are not often adduced in many authors. Moreover, as a result of the derivational nature of some principles, writers usually neglect their study even though they employ them.

(III). In an attempt to determine the unparalleled significance of the *nous* and *ratio* in the knowledge of the principles, in Chapter Three we examined the Aristotelian-Thomistic notion of *nous*, while contrasting it with the analytical notion of *ratio*. Since the concept of *nous* is fundamental in the Thomistic analysis of the first intellectual concepts, *ens* and *principia prima*, we studied *nous* and its role in the first judgment concerning being (*ens*). In like manner, we examined Aquinas' suppositions on the first intellectual operations. This was to help our understanding of the comprehension of being-in-act and, subsequently, of the first principles. We surveyed the complementarity between *simplex apprehensio* and *compositio/divisio* in understanding *ens*. We, also, investigated Aquinas' proposal in the concept of *simplex apprehensio*, and its significance in the notion of *primum cognitum*. The inquiry instructed our appreciation of the blend *simplex apprehensio* and implicit *judicium* in the formation of the *primum cognitum* (*ens*).

Since the notion of integral intellectual knowledge necessarily involves 'intuitive abstraction' through concepts and judgments, we examined this notion. We established the indispensable role of *compositio/divisio* in realistic knowledge. With an analytical review of some significant submissions by eminent Thomists, we verified that *compositio/divisio* regarding the principles is the stage of comprehensive human knowledge. As a major part of the discourse, we gave fairly extensive attention to the notion of *separatio* in Aquinas because of its central role in the first intellectual operations. The study of the knowledge of first operations of the intellect is incomplete if transcendental notions are neglected; hence, we briefly investigated transcendental notions, in order to determine their import in the knowledge of the first principles. As attributes of *ens*, the transcendentals are involved in determining the first fundamental ontological principles. The roles of the transcendental notions of *multitudo*, *veritas*, and *bonum* stand out in this consideration because of their significance in the concept of *principia prima*. Overall, we considered the fundamental character of *ens*.

(IV). The foregoing points are a grounding for our principal analysis, i.e. the examination of *habitus primorum principiorum* in Chapter Four as the way through which we constantly and implicitly know the principles according to Aquinas. In view of the subtle nature of the investigation, we began with the justification of the actuality of *habitus primorum principiorum*. Starting from *intellectus principiorum* as the first primordial expression of every *habitus*, we considered its function in the human intellectual system. *Intellectus principiorum* is adept with an enormous quality of all comprehension. It penetrates all reality. Most importantly, *intellectus principiorum* discovers *ens* in its primal nature and processes. This *habitus* is *primus inter pares* in the knowledge of the existing reality. With its natural interactive trait, it can access all dimensions of truth unconsciously and intuitively (pre-conceptually, implicitly). As an immaterial *habitus*, *intellectus principiorum* penetrates into the realm of being. This is the feature of the intellect's operation that the Angelic Doctor likens to the angelic manner of knowing. Above all, *intellectus principiorum* is the *scientia* of *scientiae*. In view of this import, its object is *ens, et ea quae sunt per se entis inquantum huiusmodi*. To indicate its absolute ability and certitude in the grasp of knowledge, Aquinas emphasises that *nullum aliud genus cognitionis quam intellectus, est certius scientia*. Accordingly, in Aquinas, *intellectus principiorum* is the acme of apprehension of *ens* and all its transcendental attributes.



In like manner, the principle of non-contradiction (PNC) is an immediate articulation of *intellectus principiorum*. The PNC is not restricted only to logic, as in Kant. Unlike the Kantian common but negative condition for all truth, the PNC is an authentic, fundamental, realistic condition of truth. The PNC objectively is an all-embracing judgmental notion about every reality. The PNC is, essentially, the underlying judgment for all verity concerning any human knowledge. Its structural formulation of being and non-being assigns it a primacy over every other existent principle. Subsequently, the PNC is not merely a judgment, but the pre-judgmental judgment that incites other intellectual operations. It is the intellect's real nature in expression. Additionally, an analytical appraisal of the enduring polemics on the PNC shows that the opposition of *ens* and *non-ens*, as understood by Aquinas, is real, that is to say, stemming from our experiential intellectual knowledge.

On the practical counterpart, we have synderesis. We established that Aquinas is not the inventor of the notion since it is traditional, but he gives synderesis an important place in realistic philosophy. This is because Aquinas appositely unifies the Neo-Platonic nuance with the Aristotelian ethical practical reason. On this, the Angelic Doctor fittingly indicates *recta ratio* as the core ethical investigation on which the notion of synderesis finds support. Synderesis is the basis for the knowledge of every other principle in the practical order, so it is the basis of understanding of all the practical principles. Life finds its meaning in acting for an end, and the 'good' is the justified end of every action. This good can be related back to the ultimate good (*sapientia*). Synderesis (the principle of the good) is the underlying principle that equips conscience with its acts to attain this ultimate good. And so, synderesis is the quintessence of *ratio*, because Aquinas likens it to *scintilla rationis* (the spark of reason) and to *ratio naturalis* (true natural reasoning).

The above-mentioned acts as a lead into the investigation of the problem of 'innatism'. This controversy stems from the Thomistic proposals on *habitus principiorum* and *intellectus agens*. Although there are elements of innatist views in Aquinas' suppositions, he also meticulously and rightly retains his stand of

the human intellect's initial *tabula rasa* at birth. The innate character of the intellect excludes the possession of innate ideas. *Habitus principiorum* is simply a natural predisposition, which is implicitly actualised to the extent that sensitive knowledge is activated. Hence, we affirmed that, although Aquinas discusses innate principles (but not innate ideas), his proposal is not the same as 'innatism'. Accordingly, Aquinas shows the innate illuminator in the cognitive faculty as *intellectus agens* without the negative import of 'innatism' and 'illuminism'. Following his innovative skill, the Angelic Doctor further escapes the trap of an *a priori* or *a posteriori* knowledge through his theory of participation.

(V). To determine a systematic justification for the previous controversial considerations on the first Thomistic principles becomes a serious challenge. This is because the major part of the analyses is highly fundamental and has no justification, since the first principles are basic justifiers. However, we discovered a solution in the Aristotelian assumption of the dialectical *ad absurdum* indirect proof. Aquinas does not dedicate an independent argument to demonstration *ad absurdum* of the *principia prima*. This forms part of our analyses in the Fifth Chapter with an examination of the evidence of the first principles. Through the Aristotelian-Thomistic discourse on the dialectical demonstration, we launched into an analytical review of other interpretations of some Thomists on the theme. The process involves the use of the denial included in the celebrated *èlenchos* method. The dialectical negation substantiates the *principia* through a detection of inconsistency in the very notion of the denier of the *principia prima*. Subsequently, the first principles remain as indispensable foundations of realistic knowledge and cannot be demonstrated, as such. Metaphysics, therefore, discovers its enhancement in the dialectical intricacies, not simply in untested intuitions.

Through the preceding discourse, an inquiry on the *per se* and *per se nota* in Aquinas as the horizon of 'evidence' becomes relevant. We surveyed the relationship of the *per se nota* with the *principia prima* according to the Angelic Doctor. The *per se nota* notions in Aquinas' understanding are on different levels, mainly, *per se nota secundum se* and *per se nota quoad nos*. The notions and relationship of truth, intelligibility, and rational judgment naturally flow into the discourse as analytical aspects of the *per se nota*. Within this spectrum, we studied two major features on the connection of truth and intelligibility within the human mind's *resolutio* operations.

The notion of the mind's *resolutio* comprises rational processes of *inventio* and *iudicium*, *resolutio* and *compositio*. This concept invariably involves the dual concepts of *intellectus et ratio*. For the mind to make a realistic analysis, the two components of the mind always work together. There cannot be a comprehensive synthesis without proper analysis of the mind, and vice-versa. In order to establish the mind's ultimate *resolutio*, the intellect operates in the same way to arrive at *sapientia*. Even though *intellectus* is the *primum principium par excellence*,



*sapientia* is the highest of all habits because it instructs *intellectus*. Through *simplex apprehensio*, *intellectus* discovers the *primum cognitum*, but *intellectus* is finally resolved in *sapientia*, theoretically as well as practically. Consequently *intellectus* with its 'why' and 'explanation' through its *resolutio* in *sapientia*, engenders all sciences from the lowest natural sciences to metaphysics. Except for theology, which is a revealed science and beyond the scope of this research, all sciences find their genesis through human *intellectus*.

Though sources are not easy to come by because of very limited philosophical work done on this aspect of Thomism, we discovered that our attempt is enriching and quite revealing about universal and particular realities. To understand truth in all its ramifications from the standpoint of objectivity, in accordance with the Thomistic theses, we need the greatest assets of the realistic philosopher. It becomes most interesting and alluring when one finds coherency amidst speculations, existent occurrences, and reality itself. Such is the truth embedded in the notion of the first ontological principles. Despite the fact that they are highly speculative, the first ontological principles are also very pragmatic. The more one searches and delves into their analysis, the better one appreciates their truth-values and their indispensability. This is evident in any aspect of the human attempt to know, to realise one's potentials, and to advance towards the ultimate end, the 'good'.

An enhanced appreciation of the good implies an improved knowledge of this principle of the good with its content of perfective practicality. Original knowledge and love of the human intellect naturally and profoundly tend towards God. This tendency of rational wisdom in Aquinas' language supposes cognitive habits, which evidence the passage from *intellectus* to *sapientia*. Inasmuch as a natural extension from intellect towards 'science' (particular sciences) is very handy, it is not essential. Instead, the movement from *intellectus* to *sapientia* is connected with the attainment of the end of human life. Further, a proper understanding of Aquinas' notion of the first principles invariably leads through the mentioned wisdom to an appreciation of the Angelic Doctor's idea of *voluntas ut natura* through connaturality and *amor naturalis*. Any person who negates this wisdom ends in dejection and obscurity. Conversely, the wise embrace the loving knowledge of God as a radical self-consciousness concerned with the reciprocal love of ourselves and of its 'reduplication' in the love of our neighbour. In this, one easily perceives a natural tendency of the desire to 'be' and to 'know-love' that flows from 'being' and 'knowing-loving'. Therefore, an adequate knowledge of the first Thomistic realistic principles leads the knower not only to a simple grasp of the principles, but also to a conviction of their correlations and progressive fulfilment in true wisdom. Essentially, wisdom is related to metaphysics and philosophical anthropology. Nonetheless, unconditional wisdom flows through the personal religious-ethical interpretational assimilation, which can be equated with practical *sapientia*.

This study on the knowledge of the Thomistic first principles (challenging, as it is) has shown us that no formulation of the human mind is possible without the presupposition of the ontological *principia prima*. It substantiates principally the intertwined relationship between the human mind's knowledge and the first principles culminating in the habit of wisdom. Although confronted with most contemporary philosophical feigned maxims that derogate the first Thomistic realistic principles, we emphasised the relevance of the first realistic ontological principles. We are aware of our controversial stand and demonstration in this affirmation. Given individual differences in temperament, psychosomatic growth, interests, educational development, and conviction, people will respond differently to our thesis in this philosophical work. Consequently, this present research, established on a definite epistemological theory and following the Thomistic realistic metaphysical principles, can hardly fail to be a 'contradictory signal'. Readers of different categories may find some conclusions daring, others may find them appallingly scholastic, and still another group may appreciate our effort to keep in touch with reality and to construct a genuine science of the existent reality as actually existent, by the avoidance of 'chauvinism', 'logicism' and undue 'rationalism'. However, our efforts and vision are channelled towards our philosophical enterprise, which is to follow genuine Thomism in our times.

Part of our aspiration in this study is principally to delineate the resourcefulness of the Thomistic thought as shown in the first principles. It is geared towards proposing an authentic meaningfulness in life discovered through right rationality. Although this research is fairly extensive, we do not pretend to have exhausted the argument. There are still prospective areas based on the *principia prima* to develop. This is especially true of specific themes like the principle of causality, precise arguments on the principles concerning being as such, and participation. In Aquinas' thought about *principia prima*, one discovers a transcendental metaphysical reality. Using the philosophical idiom and the evidence of the existent reality, the Angelic Doctor directs the human mind to God, the final transcendental goal. In this, Aquinas appropriately shows that the quest into the first ontological principles remains part of the supreme attainment of the human intellect in search of truth. Aquinas' metaphysical view clearly shows that this love of truth in the knowledge of material and human reality is fulfilled with the metaphysical knowledge of the Infinite Truth and Wisdom, which is God. This intellectual path remains open to the knowledge of the principles of supernatural faith, which constitutes the basis of theological wisdom.

# Select Bibliography

## A. Classical Sources

### A.1 *St. Thomas Aquinas' Works: Latin Texts*

#### a. *Opera maiora*

*In I Sententiarum*. Parma: Petri Fiaccadori, vol. VI, 1856, & vol. VII, 1858.

*In II Sententiarum*. Parma: Petri Fiaccadori, vol. VI, 1856, & vol. VII, 1858.

*In III Sententiarum*. Parma: Petri Fiaccadori, vol. VI, 1856, & vol. VII, 1858.

*In IV Sententiarum*. Parma: Petri Fiaccadori, vol. VI, 1856, & vol. VII, 1858.

*Quaestiones disputatae De anima*. Turin: Marietti, 1953.

*Quaestiones disputatae De malo*. Turin: Marietti, 1953.

*Quaestiones disputatae De potentia Dei*. Turin: Marietti, 1953.

*Quaestiones disputatae De spiritualibus creaturis*. Turin: Marietti, 1953.

*Quaestiones disputatae De veritate*. Rome: Leonine, vol. XXII, 1970–1972.

*Quaestiones disputatae De virtutibus*. Turin: Marietti, 1953.

*Quaestiones quodlibetales*. Turin: Marietti, 1956.

*Summa Contra Gentiles*. Rome: Leonine, vol. XIII, XIV & XV, 1918, 1926 & 1930.

*Summae Theologiae Prima Pars*. Rome: Leonine, vol. IV, 1988.

*Summae Theologiae Prima Secundae*. Rome: Leonine, vol. V, VI & VII, 1948.

*Summae Theologiae Secunda Secundae*. Rome: Leonine, vol. VIII, 1895, IX, 1897, X, 1899.

*Summae Theologiae Tertia Pars*. Rome: Leonine, vol. XI, 1903 & XII, 1905.

#### b. *Opuscula*

*Compendium Theologiae*. Turin: Marietti, 1954.

*De ente et essentia*. Baur, Münster, 1933.

*De regimene principum*. Turin: Marietti, 1954.

*De substantiis separatis*. Rome: Leonine, XL, 1968.

*De unitate intellectus*. Turin: Marietti, 1954.

*Opuscula theologica*. Turin; Rome: Marietti, Vols I–II, 1954.

c. *Commentaria*

*In Aristotelis De anima*. Turin: Marietti, 1959.

*In Boethii De hebdomadibus*. Turin: Marietti, 1954.

*In Dionysii De divinis nominibus*. Turin: Marietti, 1950.

*In libros De anima II et III*. Turin: Marietti, 1959.

*In libros De caelo et mundo*. Rome: Leonine, vol. III, 1986.

*In libros De generatione et corruptione*. Rome: Leonine, vol. III, 1986.

*In libros De memoria et reminiscentia*. Turin: Marietti, 1949.

*In libros De sensu et sensato*. Turin: Marietti, 1949.

*In libros Metaphysicorum*. Turin: Marietti, 1950.

*In libros Perihermineias*. Rome: Leonine, vol. I, 1882.

*In libros Physicorum*. Rome: Leonine, vol. II, 1884.

*In libros Posteriorum Analyticorum*. Rome: Leonine, vol. I, 1882.

*In librum Boethii De Trinitate*. Leiden: Decker, 1959.

*In librum De causis*. Fribourg-Louvain: Saffrey, 1954.

*Sententia libri Ethicorum*. Rome: Leonine, vol. XLVII, 1969.

*Sententia libri Politicorum*. Rome: Leonine, vol. XLVIII, 1971.

*Super ad Colossenses*. Turin: Marietti, 1953.

*Super ad Timotheum I*. Turin: Marietti, 1953.

*Super ad Timotheum II*. Turin: Marietti, 1953.

*Tabula libri Ethicorum*. Rome: Leonine, vol. XLVIII, 1971.

*A.2 St. Thomas Aquinas' Works: English Translations*

*An Apology for the Religious Orders*. Translated by J. Procter. London 1902; Westminster, Md.: Newman, 1950.

*Aquinas on Being and Essence*. Translated by A. A. Maurer. Toronto: PIMS, 1968.

*Aristotle's De Anima with the Commentary of St. Thomas Aquinas*. Translated by K. Foster & S. Humphries. New Haven: Yale University Press, 1951.

*Aristotle on Interpretation: Commentary by St. Thomas and Cajetan*. Translated by J. T. Oesterle. Milwaukee: Marquette University Press, 1962.



*Catechetical Instructions of St. Thomas*. Translated by J. B. Collins. New York: Wagner, 1939.

*Commentary on Aristotle's Metaphysics*. Translated with intro. by J. P. Rowan, Preface by R. McInerny. Notre Dame (IN): Dumb Ox Books, 1995.

*Commentary on Aristotle's Physics*. Translated by R. J. Blackwell et. al. New Haven: Yale, 1963.

*Commentary on Aristotle's Politics*. Translated by Ernest Fortin & Peter O'Neill, in Medieval Political Philosophy: A Sourcebook, edited by Ralph Lerner. New York: Free Press of Glencoe, 1963.

*Commentary on the Book of Causes = Super librum De causis expositio*. Translated by V. A. Guagliardo; C. R. Hess; R. C. Taylor. Washington (DC): Catholic University of America Press, 1996.

*Commentary on the Metaphysics of Aristotle*. Translated by J. P. Rowan. Chicago: Regnery, 1964.

*Commentary on the Nichomachean Ethics*. Translated by C. I. Litzinger. Chicago: Regnery, 1964.

*Commentary on the Posterior Analytics of Aristotle*. Translated by F. R. Larcher. Albany, NY: Magi Books, 1970.

*Compendium of Theology*. Translated by Cyril Vollert. Herder: St. Louis, 1947.

*De Quatuor Oppositis*. Translated by George Schaller, O.P. Dover, Mass.: St. Stephen's Priory, Dominican House of Philosophy, 1963.

*The Disputed Questions on Truth*. Vol. I. Translated by Robert William Mulligan, S. J. Chicago: Henry Regnery Co., 1952.

*The Disputed Questions on Truth*. Vol. II. Translated by James V. McGlynn, S. J. Chicago: Henry Regnery Co., 1953.

*The Disputed Questions on Truth*. Vol. III. Translated by Robert W. Schmidt, S. J. Chicago: Henry Regnery Co., 1954.

*The Division and Methods of the Sciences, Questions V–VI of the Commentary on Boethius' De Trinitate*. Translated by Armand Maurer. Toronto: Pontifical Institute of Mediaeval Studies, 1953.

*Faith, Reason, and Theology, Questions I–IV of the Commentary on Boethius' De Trinitate*. Translated by Armand Maurer. Toronto: Pontifical Institute of Mediaeval Studies, 1986.

*On Charity*. Translated by L. H. Kendzierski. Milwaukee: Marquette University Press, 1960.

*On the Eternity of the World*. Translated by Cyril Vollert. Milwaukee: Marquette University Press, 1964.

*On Evil*. Translated by Jean Oesterle. Notre Dame (IN): University of Notre Dame Press 1995.

*On the Power of God*. Translated by English Dominican Fathers. London: Burns, Oates, and Washbourne, 1932–34.

*On Spiritual Creatures*. Translated by M. C. Fitzpatrick. Milwaukee: Marquette University Press, 1951.
*On the Unity of the Intellect against the Averroists*. Translated by Beatrice Zedler. Milwaukee: Marquette University Press, 1968.
*On the Virtues in General*. Translated by J. P. Reid. Providence, R.I.: The Providence College Press, 1951.
*Questions on the Soul*. Translated by James H. Robb. Milwaukee: Marquette University Press, 1984.
*Quodlibetal Questions*. Vols. I & II. Translated with intro. & notes by Sandra Edwards. Toronto: Pontifical Institute of Mediaeval Studies, 1983.
*Summa Contra Gentiles*. Translated by English Dominicans. London: Burns, Oates, and Washbourne, 1934.
*Summa Theologiae*. Translated by English Dominicans. London: Burns, Oates, and Washbourne 1912–36. Reprint. New York: Benziger 1947–48. Reprint. New York: Christian Classics, 1981.
*Treatise on Separate Substances*. Translated by F. J. Lescoe. West Hartford, Conn., 1959.

### A.3 Philosophical Classics

Albert the Great. *Alberti Magni Ordinis Fratrum Praedicatorum Super Dionysium De Divinibus Nominibus*. Monasterii Westfalorum: Aschendorff, 1972.
Aristotele. *Analitici secondi, organon IV*. Translated with comm. by M. Mignucci, intro. by J. Barnes, Roma-Bari: Editori Laterza, 2007.
Aristotle. *De anima (On the Soul)*. Translated with intro. & notes by T. H. Lawson. London: Penguin Books, 1986.
———. *Aristotle's Metaphysics*. Translated by J. Sachs. Santa Fe. New Mexico: Green Lion Press, 1999.
———. *Aristotle's Posterior Analytics*. Translated with notes by J. Barnes. Oxford: Clarendon Press, 1975.
———. *The Complete Works of Aristotle: the Revised Oxford Translation*. Vols. I & II. Edited by J. Barnes. Princeton (NJ): Princeton University Press, 1991.
———. *Great Books of the Western World*. Vols. VIII & IX. Edited chiefly by R. M. Hutchins. London: Encyclopedia Britannica, Inc., 1952.
———. *Metaphysics*. Vols. 1 & 2. Edited with intro. & comm. by W. D. Ross, Oxford: Clarendon Press, 1975.
———. *Nicomachean Ethics*. Translated with intro. & comm. by C. Rowe & S. Broadie. Oxford: Oxford University Press, 2002.
Augustine. *Confessions*. Edited by J. J. O'Donnell. Oxford: Clarendon Press, 1992.



Hume, David. *A Treatise of Human Nature*. A critical edition, reprint. Edited by M. J. Norton & D. F. Norton. Oxford: Clarendon Press, 2007.
Kant, I. *Immanuel Kant's Critique of Pure Reason*. Translated by F. M. Müller. New York; London: MacMillan, 1922.
Plato. *Complete Works*. Edited by J. M. Cooper & D. S. Hutchinson. Indianapolis: Hackett Publishing Company, Inc., 1997.
———. *Gorgias*. Reprint. Translated by E. R. Dodds. Oxford: Clarendon Press, 1979.
———. *Phaedo*. Reprint. Translated by D. Gallop. Oxford: Clarendon Press, 1983.
———. *Philebus*. Translated by J. C. B. Gosling. Oxford: Clarendon Press, 1975.
———. *Protagoras*. Reprint. Translated by C. C. W. Taylor. Oxford: Clarendon Press, Oxford, 1982.
———. *Republic*. Translated by A. Bloom. New York: BasicBooks, 1991.
———. *The Republic of Plato*. Translated by F. MacDonald Cornford. London [etc.]: Oxford University Press, 1970.
———. *Theaetetus*. Reprint. Translated by J. H. McDowell. Oxford: Clarendon Press, 1985.
———. *Timaeus*. Edited by in aedibus Instituti Warburgiani. Translated by P. J. Jensen, J. H. Waszink & Chalcidius. Londinii; Leidae: E.J. Brill, 1962.
Plotinus, *Ennead* V. Cambridge (MA); London: Harvard University Press, 1984 Reprint, 2001.

## B. Other Relevant Works

Aertsen, J. A. *Medieval Philosophy and the Transcendentals: The Case of Thomas Aquinas*. Leiden: E. J. Brill, 1996.
Alvira, T., L. Clavell, & T. Melendo. *Metafisica*. Firenze: Le Monnier, 1987.
Anscombe, G. E. M. & P. T. Geach. *Three Philosophers. Aristotle, Aquinas, Frege*. Oxford: Basil Blackwell, 1973.
Arnou, R. *L'homme a-t-il le pouvoir de connaître la vérité?: réponse de saint Thomas: la connaissance par habitus*. Rome: Presses de l'Université Grégorienne, 1970.
Ayers, M. *Locke: Epistemology and Ontology*. London: Routledge, 1991.
Bacchin, G. R. *Originarietà e mediazione nel discorso metafisico*. Roma: Jandi Sapi, 1963.
Bacchin, G. R. *L'originario come implesso, esperienza-discorso*. Roma: Jandi Sapi, 1963.
———. *Su l'autentico nel filosofare*. Roma: Jandi Sapi, 1963.
Balmaseda Cinquina, M. F. "*Separatio* y otros hábitos intelectuales." *Studium* 9 (2006), 311–320.

Barnes, J. "Aristotle's Theory of Demonstration." *Phronesis* 14 (1969), 123–152.
Barry, S. *Hume*. London: Routledge, 1977, 1995.
Bearsley, P. J. "Another Look at the First Principles of Knowledge." *The Thomist* 36 (1972), 566–598.
Bergson, H. *L'evoluzione creatrice*. Edited by G. Penati. Brescia: La Scuola, 1961.
Berti, E. *Aristotele: dalla dialettica alla filosofia prima*. Padova: A. Milani, 1977.
———. *Contraddizione e dialettica negli antichi e nei moderni*. Palermo: L'Epos, 1987.
———. *Introduzione alla metafisica*. Torino: UTET, 1993.
———. "Il valore "teologico" del principio di non contraddizione nella metafisica aristotelica." *Rivista di filosofia neo-scolastica* LX (1968), 1–24.
———. *Le vie della ragione*. Bologna: Il Mulino, 1987.
Bittle, C. N. *The Domain of Being: Ontology*. Milwaukee (WI): Bruce Publishing Company, 1948.
Bogliolo, L. *Essere e conoscere*. Studi tomistici; 21. Città del Vaticano: Libreria Editrice Vaticana, 1983.
Boncinelli, E. *Il cervello, la mente e l'anima*. Milano: A. Mondadori, 1999.
Bourke, V. J. "The Background of Aquinas' Synderesis Principle." In *Graceful Reason: Essays in Ancient and Medieval Philosophy Presented to Joseph Owens, C.Ss.R., on the Occasion of his Seventy-fifth Birthday and the Fiftieth Anniversary of his Ordination*, edited by L. P. Gerson. Toronto: Pontifical Institute of Mediaeval Studies, 1983.
Bourke, V. J. ed. Translation & Gen. intro. *The Pocket Aquinas*. New York: Washington Square Press, Inc., 1960.
Bradley, D. J. M. *Aquinas on the Twofold Human Good: Reason and Human Happiness in Aquinas's Moral Science*. Washington, (DC): The Catholic University of America Press, 1997.
Broadie, S. "The Sophists and Socrates." In *The Cambridge Companion to Greek and Roman Philosophy*, edited by D. Sedley. Cambridge: Cambridge University Press, 2003.
Brochard, V. *Les sceptiques grecs*. Paris: J. Vrin, 1932.
Brock, S. L. "Ars imitatur naturam: Un aspecto descuidado de la doctrina de la ley natural en S. Tomás de Aquino." Edited by R. Alvira. *El hombre: immanencia y trascendencia: actas de las XXV Reuniones filosóficas de la Universidad de Navarra*. Pamplona: Servicio de Publicaciones de la Universidad de Navarra, 1991. 383–395.
———. "Can Atheism be Rational? A Reading of Thomas Aquinas." *Acta Philosophica* 11 (2002), 215–238.
Brock, S. L. ed. *Tommaso d'Aquino e l'oggetto della metafisica*. Roma: Armando, 2004.



Brown, O. J. *Natural Rectitude and Divine Law in Aquinas: An Approach to an Integral Interpretation of the Thomistic Doctrine of Law*. Toronto: Pontifical Institute of Mediaeval Studies, 1981.
Buratti, M. L. "I principi primi secondo San Tommaso." *Divus Thomas* (Piacenza) 108 (2005), 218–252.
Burge, T. "Intellectual Norms and Foundations of Mind." *Journal of Philosophy* 83 (1986), 697–720.
Burke, C. *Conscience and Freedom*. Manila: Sinag-Tala, 1992.
Calogero, G. *I fondamenti della logica aristotelica*. Firenze: F. Le Monnier, 1927.
Campodonico, A. *Integritas: metafisica ed etica in San Tommaso*. Firenze: Nardini, 1997.
———. *Alla scoperta dell'essere: saggio sul pensiero di Tommaso d'Aquino*. Milano: Jaca Book, 1986.
Castagnino, M. A. & J. J. Sanguineti. *Tempo e universo: un approccio filosofico e scientifico*. Roma: A. Armando, 2000.
Cenacchi, G. "Il principio di non-contraddizione, fondamento del discorso filosofico." *Aquinas* 16 (1973), 255–277.
Christianson, J. M. "The Necessity and Some Characteristics of the Habit of First of Indemonstrable (Speculative) Principles." *The New Scholasticism* 62 (1988), 249–296.
Clavell, L. "Il primo principio della conoscenza intellettuale." In *L'uomo e il mondo nella luce dell'Aquinate VII, Congresso tomistico internazionale* 8: 1980: *Roma Atti dell'VIII Congresso tomistico internazionale*. Città del Vaticano: Libreria Editrice Vaticana, 1982, 62–73.
Clavell, L. & M. Pérez de Laborda. *Metafisica*. Rome: Edusc, 2006.
Cleary, J. J. "Aristotle's Criticism of Plato's First Principles." *Pensees de l'Un dans la tradition philosophique* (Les Presses de l'université Laval) 2004, 70–97.
Cohen, S. M. "Aristotle on the Principle of Non-Contradiction." *Canadian Journal of Philosophy* 16 (1986), 359–370.
Copleston, F. *A History of Philosophy*. Vols. I & II. London: Image Book, Doubleday, 1993.
Cottier, G. "Intellectus et Ratio." *Revue Thomiste* 88 (1988), 215–228.
Courtès, P. C. "Cohérence de l'être et premier principe selon saint Thomas d'Aquin." *Revue Thomiste* 70 (1970), 387–423.
———. "L'être et le non-être selon saint Thomas d'Aquin." *Revue Thomiste* 66 (1966), 575–610.
Crowe, M. B. "Synderesis and the Notion of Law in St. Thomas." In *Actes du premier congrès international de philosophie médiévale, Louvain-Bruxelles*, 1958. Louvain: Nauwelaerts, 1960.
Cruz Cruz, J. *Intelecto y razón: las coordenadas del pensamiento clásico*. Pamplona: EUNSA, 1998.

Cruz Cruz, J. *Ontología del amor en Tomás de Aquino.* Pamplona: EUNSA, 1996.
Dancy, R. M. *Sense and Contradiction: A study in Aristotle.* Dordrecht: D. Reidel Publishing Company, 1975.
D'Avenia, M. *La conoscenza per connaturalità in S. Tommaso d'Aquino.* Bologna: Edizione Studio domenicano, 1992.
Descoqs, P. *Institutiones metaphysicae generalis: éléments d'ontologie.* Paris: G. Beauchesne, 1925.
Dewan, L. "St. Thomas, Physics, and the Principle of Metaphysics." *The Thomist* 61 (1997), 549–566.
Dewey, J. *Essays on the New Empiricism:* 1903–1906. Edited by J. A. Boydston et al. Carbondale: Southern Illinois University Press, 1977.
Dicker, G. *Hume's Epistemology and Metaphysics: An Introduction.* London: Routledge, 1998.
Dillon, J. & T. Gergel. *The Greek Sophists.* Translated by J. Dillon & T. Gergel. London: Penguin Books, 2003.
Dufault, L. "The Aristotelian-Thomistic Concept of Education." *The New Scholasticism* 20 (1946), 239–257.
Dummett, M., & A. Flew. "Can an Effect Precede its Cause?" *Aristotelian Society Proceedings* 28 (1954), 27–62.
Durantel, J. *Le retour à Dieu par l'intelligence et la volonté dans la philosophie de S. Thomas.* Paris: Félix Alcan, 1918.
Elders, L. *Autour de Saint Thomas d'Aquin: recueil d'études sur sa pensée philosophique et théologique* Vol. I. Paris; Brugge: FAC; Tabor, 1987.
———. "The First Principles of Being in the Philosophy of St. Thomas Aquinas." *Doctor Angelicus* 3 (2003), 59–96.
———. *The Metaphysics of Being of St. Thomas Aquinas in a Historical Perspective.* Leiden; New York; Köln: E. J. Brill, 1993.
———. "Le premier principe de la vie intellective." *Revue Thomiste* 62 (1962) 571–586.
Evans, J. D. G. *Aristotle's Concept of Dialectic.* Cambridge: Cambridge University Press, 1977.
Fabro, C. *La nozione metafisica di partecipazione.* Roma: Editrice del Verbo Incarnato, 2005.
———. "Il nuovo problema dell'essere e la fondazione della metafisica." *Rivista di filosofia neoscolastica* 66 (1974), 475–510.
———. *Partecipazione e causalità secondo S. Tommaso d'Aquino.* Roma: Editrice del Verbo Incarnato, 2010.
———. *Percezione e pensiero.* Roma: Editrice del Verbo Incarnato, 2008.
———. "The Transcendentality of Ens-Esse and the Ground of Metaphysics." *International Philosophical Quarterly* 6 (1966), 389–427.



Flamarique, L. ed. *Fernando Inciarte: First Principles, Substance and Action.* Zürich: Georg Olms Verlag Hildesheim, 2005.
Flannery, K. L. *Acts Amid Precepts: the Aristotelian Logical Structure of Thomas Aquinas's Moral Theory.* Washington (DC): Catholic University of America Press, 2001.
———. "Theology, Metaphysics and other Sciences." *Faith* 33 (2001), 28–32.
Gagarin, M., & P. Woodruff. *Early Greek Political Thought from Homer to the Sophists.* Translated by M. Gagarin & P. Woodruff. Cambridge: Cambridge University Press, 1995.
Gardeil, H. D. *Introduction to the philosophy of St. Thomas Aquinas:* IV *Metaphysics.* St. Louis (MO); London: B. Herder Book, 1967.
Garrigou-Lagrange, R. *Dieu: son existence et sa nature: solution thomiste des antinomies agnostiques.* Paris: G. Beauchesne, 1933.
———. *Reality: A Synthesis of Thomistic Thought.* St. Louis (MO); London: B. Herder Book, 1950.
———. *Le sens commun, la philosophie de l'être et les formules dogmatiques.* Paris: Desclée, 1922.
———. *Il senso commune.* Brescia: La Scuola Editrice, 1952.
Gentile, M. *Come si pone il problema metafisico.* Padova: Liviana, 1955.
———. *Filosofia e umanesimo.* Brescia: La scuola, 1947.
Giacon, C. *Verità, esistenza, causa.* Bologna: Zanichelli, 1973.
Gilson, É. *Being and Some Philosophers*, 2nd ed. Corrected & Enlarged. Toronto: Pontifical Institute of Mediaeval Studies, 1952.
———. *The Christian Philosophy of St. Thomas Aquinas.* Notre Dame (IN): University of Notre Dame Press, 1994.
———. *L'essere e l'essenza.* Intro. by A. Livi. Milano: Massimo, 1988.
———. *La filosofia nel Medioevo: dalle origini patristiche alla fine del XIV secolo.* Firenze: Sansoni, 2005.
———. *The Philosophy of St. Thomas Aquinas.* Cambridge: W. Heffer & Sons Ltd., 1924.
———. "Les principes et les causes." *Revue Thomiste* LII (1952), 39–63.
———. *Il realismo, metodo della filosofia*, Translated with comm. by A. Livi. Roma: Casa Editrice Leonardo da Vinci, 2008.
———. *Thomist Realism and the Critique of Knowledge.* translated by Mark A. Wauck. San Francisco: Ignatius Press, 1986.
———. *The Unity of Philosophical Experience.* New York: C. Scribner's Sons, 1937.
Glenn, P. J. *A Tour of the Summa.* St. Louis: Herder Book Co., 1960.
González Álvarez, A. *Tratado de metafísica: ontología.* Madrid: Gredos, 1967.
González, A. M. "Depositum Gladius non debet Restitui Furioso: Precepts, Synderesis, and Virtues in Saint Thomas Aquinas." *The Thomist* 63 (1999), 217–240.

González, O. J. "Tomas de Aquino: la aprehensión del acto de ser." *Anuario filosófico* 22 (1989), 147–159.
Gredt, J. *Elementa philosophiae aristotelico-thomisticae*, II *Metaphysica, ethica*. Friburgi Brisgoviae: Herder, 1953.
Grene, M. G. *A Portrait of Aristotle*. Chicago: Chicago University Press, 1963.
Grice, H. P., "The Causal Theory of Perception." *Proceedings of the Aristotelian Society* 35 (1961), 121–152.
Guthrie, W. K. C. *A History of Greek Philosophy*. Vol. IV. Cambridge: Cambridge University Press, 1975.
———. *The Sophists*. Cambridge: Cambridge University Press, 1971.
Haldane, J. "A Return to Form in the Philosophy of Mind." *Ratio: An International Journal of Analytic Philosophy* 11 (1998), 253–277.
———. "Insight, Inference and Intellection." *Proceedings of the American Catholic Philosophical Association* 73 (1999), 31–45.
Hintikka, J. "On the Ingredients of an Aristotelian Science." *Nous* 6 (1972), 55–69.
Hoenen, P. *Reality and Judgment According to St. Thomas*. Translated by Henry F. Tiblier. Chicago: H. Regnery, 1952.
Horrigan, P. G. *Epistemology: An Introduction to the Philosophy of Knowledge*. New York: iUniverse Inc., 2007.
Inagaki, B. R. "*Habitus* and *Natura* in Aquinas." In *Studies in Medieval Philosophy*, edited by J. F. Wippel. Washington (DC): Catholic University of America Press, 1987.
Irwin, T. H. *Aristotle's First Principles*. Reprint. Oxford: Clarendon Press, 1990.
———. "First Principles in Aristotle's Ethics." *Midwest Studies in Philosophy* 3 (1978), 252–272.
Irwin, T. H. "Who Discovered the Will?" In *Philosophical Perspectives 6: Ethics*, edited by J. E. Tomberlin. Atascadero, CA: Ridgeview, 1992.
James, W. *The Principles of Psychology*. Vol. I. New York: H. Holt and Company, 1890.
Jolivet, R. *Trattato di filosofia: IV Metafisica* (II): *ontologia e teodicea*. Morcelliana, Brescia: 1960.
Jordan, M. D. *Ordering Wisdom: the Hierarchy of Philosophical Discourses in Aquinas*. Notre Dame (IN): University of Notre Dame Press, 1986.
Katz, D. "The Functional Approach to the Study of Attitudes." In *Readings in Attitude Theory and Measurement*, edited by M. Fishbein. New York: Wiley, 1967.
Kenny, A. *The Metaphysics of Mind*. Oxford: Clarendon Press, 1990.
Kiely, B. M. *Psychology and Moral Theology: Lines of Convergence*. Rome: Gregorian University Press, 1987.
Klassen, D. J. *Thomas Aquinas and Knowledge of the First Principles of the Natural Law*. Unpublished dissertation of Washington, (DC): The Catholic University of America, 2007.



Kraut, R. "Introduction to the Study of Plato." In *The Cambridge Companion to Plato*, edited by R. Kraut. Cambridge: Cambridge University Press, 2006.
Kvanvig, J. L. *The Intellectual Virtues and the Life of the Mind: on the Place of the Virtues in Epistemology*. Savage, Maryland: Rowman and Littlefield, 1992.
Lee, H. D. P. "Geometrical Method and Aristotle's Account of First Principles." *Classical Quarterly* (1935), 113–124.
Lisska, A. J. "Medieval Theories of Intentionality: from Aquinas to Brentano and Beyond." In *Analytical Thomism: traditions in dialogue*, edited by C. Paterson & M. S. Pugh. Aldershot: Ashgate, 2006.
Livi, A. "Che cos'è l'essere per i metafisici? Questioni aperte." *Sensus communis* 9 (2008), 149–164.
———. "Does 'Common Sense Philosophy' Finally Eliminate Common Sense?" *Sensus communis* 4 (2003), 239–260.
———. *Filosofia del senso comune: logica della scienza e della fede*. Roma: Casa editrice Leonardo da Vinci, 2010.
———. *Il principio di coerenza: senso comune e logica epistemica*. Roma: A. Armando, 1997.
MacDonald, S. "Theory of Knowledge." In *The Cambridge Companion to Aquinas*, edited by N. Kretzmann & E. Stump. Cambridge: Cambridge University Press, 1993.
MacIntyre, A. *First Principles, Final Ends and Contemporary Philosophical Issues*. Milwaukee: Marquette University Press, 1990.
Manser, G. M. *Das Wesen des Thomismus*. Freiburg (CH): Paulusverlag, 1949.
Maréchal, J. *Le point de départ de la métaphysique: leçons sur le développement historique et théorique du problème de la connaissance*, Vols. I–V. Bruxelles: Paris: Édition universelle; Desclée de Brouwer, 1927–1949.
Maritain, J. *Existence and the Existent: An Essay on Christian Existentialism*. Garden City (NY): Doubleday and Co., 1957.
———. *An Introduction to the Basic Problems of Moral Philosophy*. Albany (NY): Magic books, 1990.
———. *Man and the State*. Washington (DC): Catholic University of America Press, 1998.
———. *A Preface to Metaphysics: Seven Lectures on Being*. New York: Sheed and Ward, 1948.
———. *Sept leçons sur l'être et les premiers principes de la raison speculative*. Paris: P. Téqui, 1936.
Maurer, A. *Being and Knowing: Studies in Thomas Aquinas and Later Medieval Philosophers*. Toronto: Pontifical Institute of Mediaeval Studies, 1990.
McCabe, H. "Aquinas on Good Sense." *New Blackfriars* 67 (1987), 419–431.
McInerny, R. *Art and Prudence: Studies in the Thought of Jacques Maritain*. Notre Dame (IN): University of Notre Dame Press, 1988.

McInerny, R. "Prudence and Conscience." *The Thomist* 38 (1974), 291–305.
———. *St. Thomas Aquinas*. Notre Dame (IN); London: University of Notre Dame Press, 1977.
Mercier, D. J. *A Manual of Modern Scholastic Philosophy*. London; St. Louis (MO): Kegan Paul, Trench, Trübner and Co., 1938.
Mier y Terán, R. "Prioridad del acto en la génesis de los hábitos operativos." In *Ensayos aristotélicos*, edited by J. L. Rivera Noriega & V. Aspe Armella. México, (DF): Universidad Panamericana: Publicaciones Crúz O., 1996.
Millán-Puelles, A. *La formación de la personalidad humana*. Madrid: Rialp, 1963.
Molina, F. *La sindéresis*. Pamplona: Servicio de Publicaciones de la Universidad de Navarra, 1999.
Molinaro, A. *Metafisica: corso sistematico*. Cinisello Balsamo: San Paolo, 1994.
Mondin, B. *La metafisica di S. Tommaso d'Aquino e i suoi interpreti*. Bologna: Edizioni Studio Domenicano, 2002.
———. "Il momento ascendente della metafisica di S. Tommaso d'Aquino." *Rivista di filosofia neo-scolastica* 55 (1963) 287–316.
Mulligan, R. W. "Ratio Superior and Ratio Inferior in St. Albert and St. Thomas." *The Thomist* 19 (1956), 339–367.
Naus, J. E. *The Nature of the Practical Intellect According to Saint Thomas Aquinas*. Roma: Libreria Editrice dell'Università Gregoriana, 1959.
Nelson, D. M. *The Priority of Prudence: Virtue and Natural Law in Thomas Aquinas and the Implications for Modern Ethics*. University Park (PA): Pennsylvania State University Press, 1992.
Nicholl, A. Mc. "Negation." *Congresso internazionale "Tommaso D'Aquino nel suo settimo centenario" (1974: Roma-Napoli)*. Napoli: Edizioni Domenicane Italiane, 1974. 654–664.
O'Donnell, R. A. *Hooked on Philosophy: Thomas Aquinas Made Easy*. New York: Alba House, 1995.
Owens, J. "Aquinas on Knowing Existence." *The Review of Metaphysics* 29 (1975/6), 670–690.
———. *The doctrine of being in the Aristotelian Metaphysics: A Study in the Greek Background of Medieval Thought*. Toronto: Pontifical Institute of Mediaeval Studies, 1978.
———. *An Elementary Christian Metaphysics*. Milwaukee: Bruce Publishing Company, 1963.
———. *An Interpretation of Existence*. Houston (TX): Center for Thomistic Studies, 1985.
———. "A Note on the Approach to Thomistic Metaphysics." *The New Scholasticism* 28 (1954), 454–476.
Pangallo, M. *"Habitus" e vita morale: fenomenologia e fondazione ontologica*. Napoli; Roma: LER, 1988.



Pasnau, R. *Thomas Aquinas on Human Nature: a Philosophical Study of Summa Theologiae, Ia, 75–89*. Cambridge; New York: Cambridge University Press, 2002.
———. ed. *The Cambridge Translations of Medieval Philosophical Texts, vol. 3: Mind and Knowledge*. Cambridge (UK) [etc.]: Cambridge University Press, 2002.
Payer, P. J. "Prudence and the Principles of Natural Law: A Medieval Development." *Speculum* 54 (1979), 55–70.
Peillaube, É. *Initiation à la philosophie de Saint-Thomas*. Paris: M. Rivière, 1933.
Percivale, F. *Da Tommaso a Rosmini: indagine sull'innatismo con l'ausilio dell'esplorazione elettronica dei testi*. Venezia: Marsilio, 2003.
Pérez de Laborda, M. "E' possibile negare il principio di contraddizione?" *Acta Philosophica* 6 (1997), 277–288.
Pétrin, J. "L'habitus des principes spéculatifs et la syndérèse." *Revue de l'Université d'Ottawa* 18 (1948), 208–216.
Phelan, G. B. "A Note on the Formal Object of Metaphysics." In *Essays in Modern Scholasticism* edited by A. C. Pegis. Westminster MD: 1944.
Pieper, J. *Prudence*. New York: Pantheon Books, 1959.
Polo, L. *El conocimiento habitual de los primeros principios*. Pamplona: EUNSA, 1993.
———. *El conocimiento racional de la realidad*. Pamplona: Servicio de Publicaciones de la Universidad de Navarra, 2004.
Popper, K. *Logic of Scientific Discovery*. London: Hutchinson, 1959.
———. *Logik der Forschung*. Vienna: Julius Springer Verlag, 1935, 1989.
Possenti, V. "L'intuizione astrattiva e i primi principi speculativi nel tomismo, V, Problemi metafisici." *Atti dell'VIII Congresso Tomistico Internazionale*. Città del Vaticano: Libreria Editrice Vaticana, 1982, 93–146.
Pouillon, H. "Le premier traité des propriétés transcendentales." *Revue néoscolastique de philosophie* XLII (1939), 40–77.
Proclus, D. & H. Tarrant. *Commentary on Plato's Timaeus*. Cambridge: Cambridge University Press, 2007.
Raeymaeker, L. de. *Metaphysica generalis*. Lovanii: E. Warny, 1935.
———. "La profonde originalité de la métaphysique de saint Thomas d'Aquin." *Die Metaphysik im Mittelalter: ihr Ursprung und ihre Bedeutung: Miscellanea Mediaevalia* II (1963), 14–29.
Reale, G. & R. Radice. *Storia della filosofia antica*. Vol. I. Milano: Vita e Pensiero, 1989.
Régis, L-M. *L'odyssée de la métaphysique*. Montréal: Institut d'études médiévales, 1949.
Reith, H. *An Introduction to Philosophical Psychology*. Englewood Cliffs, N. J.: Prentice-Hall, Inc., 1956.

Reith, H. *The Metaphysics of St. Thomas Aquinas*. Milwaukee: The Bruce Publishing Company, 1958.
Renard, H. "The Habits in the System of St. Thomas." *Gregorianum* 29 (1948), 88–117.
———. *The Philosophy of Being*. Milwaukee (WI): Bruce Publishing Company, 1950.
Rijk, L. M. De. *Aristotle: Semantics and Ontology.* Vol. I. Leiden: E. J. Brill, 2002.
Rokeach, M. *Beliefs, Attitudes and Values: a Theory of Organization and Change*. San Francisco: Jossey-Bass, 1968.
Romera, L. *L'uomo e il mistero di Dio: Corso di teologia filosofica*. Roma: Edusc, 2008.
Rosmini, A. *Conscience*. Durham (NC): Rosmini House, 1989.
Ross, W. D. *Aristotle*. London: Methuen & Co. Ltd., 1945.
———. *Aristotle: A Complete Exposition of his Works & Thought*. New York: Meridian Books, Inc., 1959.
———. "The Discovery of the Syllogism." *Philosophical Review* 48 (1939), 251–272.
Runia, D. T. *Philo of Alexandria and the Timaeus of Plato.* Leiden: E. J. Brill, 1986.
Sánchez de Alba, E. *La esencia del hábito según Tomás de Aquino y Aristóteles*. Pamplona: Servicio de Publicaciones de la Universidad de Navarra, 2000.
Sandin, B. T. "'Lo primario' en el hábito." In *L'agire morale, Tommaso d'Aquino nel suo settimo centenario. Atti del Congresso internazionale,* 5. Napoli: Edizioni domenicane italiane, 1977, 540–549.
Sanguineti, J. J. "El conocimiento personal de los primeros principios." In *In Umbra Intelligentiae*, edited by A. L. Gonzalez & M. I. Zorroza. Pamplona: EUNSA, 2011.
———. *La filosofía de la ciencia según Santo Tomás*. Pamplona: EUNSA, 1977.
———. *Introduzione alla gnoseologia*. Firenze: Le Monnier, 2003.
———. "Karl Popper: Congetture e confutazioni." *Cultura & Libri* 86 (1993), 13–33.
———. *Logic and Gnoseology.* Rome: Urbaniana University Press, 1988.
———. "Los principios de la racionalidad en Santo Tomás." *Espíritu* XLI (1992), 109–137.
———. *Scienza aristotelica e scienza moderna.* Roma: Armando Editore, 1992.
———. "La unidad y multiplicidad del universo." *Anuario filosófico* XII (1979), 135–170.
Schall, J. V. *Jacques Maritain: the Philosopher in Society.* Lanham (MD) [etc.]: Rowman and Littlefield, 1998.



Schmidt, R. W. *The Domain of Logic according to Saint Thomas Aquinas*. The Hague: M. Nijhoff, 1966.
———. "L'emploi de la séparation en métaphysique." *Revue Philosophique de Louvain* 58 (1960) 373–393.
Scholz, H. *The Ancient Axiomatic Theory.* Vol. I. In *Articles on Aristotle*, edited by J. Barnes, M. Schofield & R. Sorabji. London: Duckworth, 1975.
Schuster, J. "Von den ethischen Prinzipien: eine Thomasstudie zu S. Th. Ia IIae, q. 94, a. 2." *Zeitschrift für katholische Theologie* 57 (1933): 44–65.
Sedley, D. *The Cambridge Companion to Greek and Roman Philosophy.* Cambridge: Cambridge, 2003.
———. "Introduction." In *The Cambridge Companion to Greek and Roman Philosophy*, edited by D. Sedley. Cambridge: Cambridge University Press, 2003.
Seidl, H. "Die aristotelischen Quellen zur Transzendentalien-Aufstellung bei Thomas von Aquin, De veritate, q. 1, art. 1." *Philosophisches Jahrbuch* 80 (1973), 166–171.
Sellés, J. F. *Los hábitos intelectuales según Tomás de Aquino*. Pamplona: EUNSA, 2008.
Siebeck, H. "Noch einmal die Synteresis." *Archiv für Geschichte der Philosophie* 10 (1897), 520–529.
Smith, N. D., A. Vaidya, & F. Allhoff. *Ancient Philosophy: Essential Readings with Commentary.* Oxford: Blackwell Publishing, 2008.
Smith, V. E. "On the Being of Metaphysics." *The New Scholasticism* 20 (1946), 72–81.
Stump, E. *Aquinas*. London: Routledge, 2003.
Torrell, J. - P. *Saint Thomas Aquinas, Vol. I. The Person and his Work*. Washington, (DC): Catholic University of America Press, 1996.
———. *Saint Thomas Aquinas, Vol. II. Spiritual Master*. Washington, (DC): Catholic University of America Press, 2003.
Twomey, J. E. *The General Notion of the Transcendentals in the Metaphysics of Saint Thomas Aquinas*. Washington, (DC): The Catholic University of America Press, 1958.
Vansteenkiste, C. "Il metodo di san Tommaso." In *Le ragioni del tomismo: dopo il centenario dell'enciclica "Aeterni Patris"*. Milano: Ares, 1979.
———. ed. *Rassegna di letteratura tomistica: Thomistic bulletin = boletín tomista = tomistische Literaturschau*, Vol. VIII. Napoli: Editrice domenicana italiana, 1976.
Velde, R. A. te. *Participation and Substantiality in Thomas Aquinas*. Leiden; New York; Köln: E. J. Brill, 1995.
Weisheipl, J. A. *Friar Thomas d'Aquino: his Life, Thought, and Works*. Washington (DC): Catholic University of America, 1983.

Westberg, D. *Right Practical Reason: Aristotle, Action and Prudence in Aquinas.* Oxford: Clarendon Press, 1994.

Wieland, W. *Die aristotelische Physik.* Göttingen: Vandenhoeck & Ruprecht, 1962; 1970.

———. *Aristotle's Physics and the Problem of Inquiry into the Principles.* Vol. I. In *Articles on Aristotle*, edited by J. Barnes, M. Schofield & R. Sorabji. London: Duckworth, 1975.

Wilhelmsen, F. D. "The Concept of Existence and the Structure of the Judgement: a Thomistic Paradox." *The Thomist* 41 (1977), 317–349.

Wippel, J. F. "Commentary on Boethius's De Trinitate: Thomas Aquinas and Avicenna on the Relationship between First Philosophy and the Other Theoretical Sciences: A Note on Thomas's Commentary on Boethius's De Trinitate, q. 5, art. 1, ad 9." *The Thomist* 37 (1973), 133–154.

———. "Metaphysics." In *The Cambridge Companion to Aquinas*, edited by N. Kretzmann & E. Stump. Cambridge: Cambridge University Press, 1993.

———. *Metaphysical Themes in Thomas Aquinas.* Washington, (DC): The Catholic University of America Press, 1984.

———. *The Metaphysical Thought of Thomas Aquinas: from Finite Being to Uncreated Being.* Washington, (DC): The Catholic University of America Press, 2000.

———. "Metaphysics and *Separatio* According to Thomas Aquinas." *The Review of Metaphysics* 3 (1978), 431–470.

Wippel, J. F. & A. B. Wolter. *Medieval Philosophy: from St. Augustine to Nicholas of Cusa.* New York; London: Free Press; Collier Macmillan, 1969.

Zigliara, T. M. *Della luce intellettuale e dell'ontologismo secondo la dottrina de' santi Agostino Bonaventura e Tommaso di Aquino.* Roma: Tipografia cattolica di F. Chiapperini e C., 1874.

# Index Locorum

## A. *Index Thomisticum* (Aquinas' Works)

## B. Aristotle and other Ancient/ Classical Works



# Index Nominum

# General Index